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by Johanna S. Wisthaler

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BY WATER
TO THE
COLUMBIAN EXPOSITION

BY
JOHANNA S. WISTHALER.

1894

"Travel is the great source of true wisdom."

--_Bearensfield_

To my amiable traveling companions,

Mr. S.R. James and family,

and

Miss Sarah E. Campbell,

this volume is affectionately inscribed

PREFACE

It has been the aim of the author: to combine a detailed narrative of her trip by water to the White City with a faithful description of the ever memorable Columbian Exposition as far as possible consistent with the scope of this work. Every opportunity has been embraced by the writer to incorporate the historical events, scientific facts, and natural phenomena most appropriate to the subject.

The author also acknowledges her indebtedness to the Lake Shore & Michigan Southern Railway Co. as well as her obligations to the Winters Art Litho Co. in Chicago. She wishes to express her gratitude to the first-mentioned corporation for having presented her with a map illustrative of the route; thus enabling the reader to trace the numerous towns and cities--on the Erie Canal and three Great Lakes--whose history and attractions have been depicted in this book.

The Lake Shore Route--selected by the Government to run the famous Fast

Mail Trains--is the only double track line between Chicago, Cleveland, Buffalo, New York, and Boston.--During the existence of the White City, the Lake Shore and Michigan Southern Railway Co. placed in service special trains for the purpose of facilitating railway transportation between the eastern cities and the "Queen of the West." The "Exposition Flyer," which accomplished nearly 1,000 miles in twenty hours from Chicago to New York, an average of about fifty miles per hour, was certainly one of the fastest trains in the World.

To the aid of the Winters Art Litho Co. the author owes her capability of furnishing this volume with a novel illustration of the World's Fair.--A gold medal was awarded to this firm for the excellence in their water color fac-simile reproductions and advancement in legitimate lithography. The credit of improvements in materially reducing the number of printings, and still maintaining excellence in results, was conceded to them by the Judges.--This company kindly permitted the author to use their copyright of the revised and most correct Bird's Eye View of the Exposition Grounds extant, which gives the readers a very adequate conception of that marvelous creation that--while existing only for such a brief period--has accomplished its mission in the highest degree, and has opened a new era in the annals of modern progress.

SCHENECTADY, N.Y., December, 1893.

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INTRODUCTION

Experience, this greatest of all teachers, will undoubtedly have convinced many of my readers that the most delightful voyage is only capable of maintaining its charms when made amidst congenial fellow-travelers. The grandest scenes can be fully enjoyed and duly appreciated when viewed through an atmosphere of physical comfort. Thus, in order to demonstrate the accuracy of the assertion:

Voyaging with Mr. James and his family was attractive and enjoyable to me in every respect,

I must make the reader acquainted with my amiable traveling companions, as well as with their floating home, the beautiful steam yacht "Marguerite."

Her owner, _Captain S. R. James_, is a stately, fine-looking, accomplished gentleman, and quite a linguist. To me it was a source of unusual pleasure to discuss French and German literature occasionally during our voyage with one who has given so much attention to these languages.

Mr. James was styled by the Buffalo Courier "a typical New Yorker;" but he impresses me more as a typified English gentleman of the thorough school, and this impression is confirmed as I reflect upon his conduct to those fortunate enough to be associated with him in any capacity.

I trust the reader will pardon me if I warmly eulogize MR. JAMES, his lovely WIFE and their FOUR sweet CHILDREN, together with Miss SARAH E. CAMPBELL, the very amiable sister of Mrs. James--who were my traveling companions on this eventful trip; for, certainly, I was extremely fortunate in my _compagnons de voyage_, whom I have thus introduced to the reader. They abandoned their lovely home for the purpose of undertaking the gigantic enterprise of making a canal and lake voyage to the White City.

The reader may well judge that sailing on a yacht presents innumerable novelties and advantages not attainable by any other conveyance. Since the parties on board a pleasure-boat concentrate all their thoughts to the expected enjoyments they cast aside all irksome forms and strait-laced habitudes, delivering themselves up to the free air to live less conventionally than at home. The preferableness of such an existence, freed from all unnecessary ceremonies, is still more perceptible when the trip is of long duration and having, moreover, for its terminus the World's Columbian Exposition, a place where the wonders, beauties, and evidences of nature's power and man's skill are gathered from all lands.

The great anticipations we had of our unique voyage were justified in every respect. For it offered us the opportunity to store our memories

with that which will never die, and to adorn them with pictures whose colors will never fade.

All this will be revealed subsequently to my courteous reader, who is cordially invited to follow me now on board the steam yacht, which formed our home for six eventful weeks.

What first strikes the observer on approaching the "Marguerite," are the graceful lines which run from the sharp, slightly bent stem to the well-rounded stern. So beautiful is her form, and so majestically does she rest upon the water, that you will have no difficulty to recognize her, even at a great distance. You observe that she is painted with taste, and all the mouldings are gilded; you also perceive that the railings are of oak wood, surmounted by finely polished brass, and the deck of narrow deal planks is as white as snow. There is nothing wanting to make her equipment harmonize with the requirements of the present era. She has a length of a hundred feet, a width of about fifteen, with a draught of five feet eight inches; being fitted out for both steam and sail navigation.

Now, dear reader, let us go below. If you consent, we will first visit the engine-room, since it contains the most essential part of the working machinery. A force of from eighty-five to ninety horse-power is developed to propel the boat. The engine is of the triple expansion type; the diameters of the cylinders being 6-1/2, 10 and 16 inches respectively.

Are you not pleased with this piece of machinery, so elegantly finished and neatly polished? From it you can conclude that the yacht is capable of running with considerable speed, amounting to thirteen miles an hour, if desired.

Let us descend to the cabin next; can anything be more tasteful and convenient? Is it not luxurious? And, although small, does not its very limited space astonish you when you view so many comforts? This is the dining-room. What can be more complete! Just look at this side-board, with its sumptuous outfit in silver and crystal. *_A multum in parvo._*

The kitchen is admirably arranged; the spacious refrigerator making it possible that a considerable amount of all sorts of provisions and delicacies can be kept on board for some time.

Let us peep into the cozy staterooms. Are they not nicely furnished? Glance at the large and comfortable berths, which can be extended so as to form double berths, as in a Pullman car. All the rooms receive light, either through side-windows or from the upper deck. Every facility for enjoying open air exercise is offered by the main deck running the whole length of the ship. The portion pertaining to the stern is especially commodious, and constituted our dining-room on pleasant days. Even when the weather was unfavorable, the awnings which inclosed this delightful place formed an excellent shelter, giving the impression we were living in a large tent.

Thus, you observe, that nothing is omitted to secure comfort. Do you see this electric bell? Well, all the staterooms are provided with such bells,

which are connected with the steward's pantry.

Now, let us go forward. These two doors form the entrance to the pilot-house; please, step in. Here is the steering wheel, and by means of these brass tubes the steersman communicates with the engineer. Look up to the ceiling. It is decorated with multitudinous charts and maps. Before we leave this room do not forget to glance at the mariner's compass in its elegant brass case.

Close by is the entrance to the fore-castle, which contains the men's berths. The crew occupying them consists of the captain, the engineer, the cook, the steward, and the seamen.

There not being accommodation for more female servants, Mrs. James was attended by only one maid. She, however, could easily spare larger retinue, because this excellent girl has assisted her mistress in performing the manifold domestic duties for more than fourteen years, and during this long period Mrs. James has learned to value her for her dexterity in all female occupations. She is also a faithful guardian of the children for whom she tenderly cares.

Flattering myself that I have given my kind readers a satisfactory, introductory description, I shall now advance with the narrative, and proceed on our journey, traversing the longest artificial waterway ever constructed by human hands; and sailing on the unsteady billows of the great lakes, which contain the largest amount of sweet water on the globe, in order to visit the World's Fair, the grandest and most complete exposition that human eyes ever beheld.

CHAPTER I.

VOYAGE ON THE ERIE CANAL FROM JULY 22ND, 10.40 A.M., TILL JULY 29TH, 1.30 P.M.

Finally, the 22nd of July, the day appointed for our departure, had arrived. Great was my satisfaction to find the auspices predicting fine weather; and, indeed, it was as beautiful as if Heaven smiled on our enterprise. When taking leave of my neighbors, it was not at all with a sad sentiment, for I had been well aware that I was going to undertake a trip which but few mortals are so fortunate as to participate.

Accompanied by my dear parents I went to Dock street, where the "Marguerite" lay all ready for leaving the flourishing city of Schenectady.

My mother, whose domestic duties recalled her to the hearth at home, was compelled to leave me, while my father remained on board the yacht, anxious to enjoy my company as long as circumstances would permit. Therefore, he gladly accepted Mr. James's kind invitation to accompany us on our journey for a short distance.

Three intimate friends of Mr. James and his family were also invited guests on the boat. These temporary traveling companions were Dr. A. Veeder, Lawyer Charles Hastings and Congressman S.J. Schermerhorn, three well known and highly estimated gentlemen from Schenectady.

At 11.40 A.M., Mr. James gave orders to haul in the lines attaching the boat to the shore; and a gun-shot at departing announced to the numerous spectators that the "Marguerite" was on the point to set out for her unusual, but most interesting trip.

We had been sailing only a very short distance, and were just facing the buildings of the General Electric Company, when our attention was attracted by a photographer who seemed to be very desirous of taking a photo of the yacht and her passengers; for he aspired to gain the most favorable posture, apparently quite a task under the circumstances. How well he succeeded in his endeavors, the readers can judge for themselves by glancing at the frontispiece of this book.

Resuming our journey, we soon had opportunity to admire the beautiful and fertile Mohawk Valley, once the home of one of the tribes composing the Five Nations. Arendt Van Curler, the noble founder of the "Place Beyond the Pines," pronounced this picturesque region the most beautiful the eye of man had ever beheld, at a time when the country was yet in its infancy. Though great changes have taken place since that remote date (1642), the grandeur of the scenes spread before us evidently showed that the country has lost little of its beauty, even at the present day, notwithstanding the white man has established in many places his smoking factories and noisy looms.

At the second lock Mr. Schermerhorn, who owns a beautiful residence near this place, in the Township of Rotterdam, joined our party, whereupon we continued sailing on the smooth surface of the canal with accelerated speed.

At 2.40 P.M., after having passed five locks, we approached _Amsterdam_, an enterprising and prosperous city of over 20,000 inhabitants, located in the midst of romantic scenery. We halted at Port Jackson for a few minutes, since this was the terminus of the voyage of Mr. Hastings and my father.

When parting with me, my father said:

"This short tour has sufficed me to perceive how delightful your voyage promises to be in company with this amiable family. Thus I leave you, feeling very happy that so many pleasures and enjoyments are awaiting you."

I answered his kind words with a hearty parting kiss, as a token of my filial love.

The two gentlemen, after having abandoned the yacht, ascended the bridge that spans the canal at that point; and bidding us farewell once more,

they pursued us with their eyes until the graceful lines of the "Marguerite" had become invisible in the distance.

Continuing our voyage, I was in perfect rapture with the ever varying magnificence of the luxuriant Mohawk Valley. In the afternoon the sky became overcast and the quietude that had been prevailing was interrupted by a thunder-clap, which gave us the signal to prepare for a shower. After the expiration of a few minutes the full-charged clouds poured their deluge upon mother earth. This natural phenomenon, however, was only of short duration; but sufficient to render the atmosphere most delightfully pure and refreshing. It was now a redoubled pleasure to view the many hills and dales, adorned in every shade of verdure, varying with romantic forest scenes; all mingling into one inexpressibly rich garniture in which Nature had royally clad herself in order to give us greeting on our way.

As we reached Fultonville, a suburban village of Fonda, about twenty-six miles from Schenectady, Dr. Veeder and Congressman Schermerhorn parted with us, wishing us a pleasurable voyage.

The "Marguerite," gliding along, neared the vicinity of Sprakers when suddenly the "heaven grew black again with the storm-cloud's frown," and a flash of lightning illuminated the sky with crimson radiance. It is for a moment as if the horizon was in flames, a spectacle glorious to behold. Another minute and a peal of thunder reaches our ears. Then the dark, heavy clouds discharge their contents in copious abundance.

"In grateful silence earth receives
The general blessing: fresh and fair
Each flower expands its little leaves
As glad the common joy to share."

While it is still raining,

"The sun breaks forth, from off the scene
Its floating veil of mist is flung.
And all the wilderness of green
With trembling drops of light is hung."

A magnificent rainbow, spanning the boundless arch on high, embellishes this superb panorama.

As the sunset was bathing all summits in soft, crimson light, and the pale lustre of the orb moon appeared in the east, we arrived at
Canajoharie.

This small town, noted for its fine stone quarries, was chosen for our abode over Sunday, and busy hands carried out the order to safely moor our craft near the bridge pertaining to the main street.

When taking a long walk about the town, I found that, although inferior in size, it is a very desirable place for summer residences; being beautifully situated on romantic slopes crowned with elegant and tasty villas.

Canajoharie is regularly and appropriately laid out with wide, well kept and adequately lighted thoroughfares, and many citizens reside in spacious and architecturally ornamented houses. It is a recognized center of trade, from which agricultural products of all kinds are shipped.

In the first historic record, dated 1757, the place was styled "Fort Cannatchocary," and mentioned as a prospering settlement. Incorporated as a town in 1788, its population has been rapidly increasing since then, and now is estimated to amount to more than 3,000.

It was a glorious morning, the 24th of July, as we left Canajoharie. The sun rose up into a cloudless heaven and poured a flood of gorgeous splendor over the landscape, as if proud of the realm he shone upon.

When I entered the pilot-house I found Mr. James, in the absence of the captain, busy steering the yacht, and in the course of our long voyage I often had opportunity to admire his abilities as a navigator. On many occasions I observed that he was very cautious in all his proceedings; that he took nothing for granted, and was only convinced of a fact when properly certified by ocular demonstration.

Engaged in a French conversation with the dexterous commodore, the time, as well as the vessel, was rapidly gliding along; the latter being assisted by a little breeze that rippled the surface of the water. So, after a three miles' ride, we approached _Fort Plain_, which boasts of numerous factories, and also the largest spring and axle works of the world. The Clinton Liberal Institute, one of the leading military schools of the State, occupies a commanding position, overlooking the valley. The site of old Fort Plain, of revolutionary memory, is within the village limits.

Having passed Cox and Mindenville, a route of nine miles brought us into the proximity of the busy town of _Little Falls_, which has a population of about 10,000. It is romantically situated, and many elegant dwellings stand upon steep acclivities, commanding views of grand and attractive sceneries. The chief products of the numerous manufactories are knit goods. Little Falls is also one of the principal cheese markets of the Empire State. The Mohawk river supplies the place with abundant water-power, having at this point a fall of forty-five feet in half a mile.

Still proceeding on our voyage, the town was soon out of sight. The sun shone with the clearest splendor from the zenith, beautifully illumining the smiling valleys, wooded hills, sparkling brooks and dimpled lakes, which makes this landscape scene so attractive. We were unable to leave our seats on the stern-deck; for everything around us seemed to have assumed the character of enchantment, and--had I been educated in the Grecian mythology--I should scarcely have been surprised to find an assemblage of Dryads, Naiads and Oreads sporting on the plain beside us.

After having viewed Mohawk, eight miles from Little Falls; Herkimer, a town of about 5,000 inhabitants; Ilion, with a population of nearly the

same number, and Frankfort, four miles from Utica, we reached the latter city as

"The sunset gorgeous dyes,
Paled slowly from the skies,"

having achieved forty-two miles that day.

Utica contains approximately 47,000 residents. At the time of the revolution it was a frontier trading-post and the site of Fort Schuyler, built to guard the settlements against the French and Indians.

We made arrangements to remain in this city over night.

A long walk through Utica made us acquainted with a regular and handsomely built city, which rises from the south bank of the Mohawk River to an elevation of 150 feet. Among the stately buildings are six large hotels, the handsome city hall, the postoffice and the bank edifice. There is also a State Lunatic Asylum. Utica, being in the center of a great dairy region, has become the most important cheese market in the United States.

Genesee Street is the principal thoroughfare lined with large blocks of commercial houses.

The city has not yet attained its centennial; but during its history of less than a century it has experienced a wonderful growth, especially during the last fifty years.

At 7 o'clock the next morning we resumed our voyage, sailing on the so-called sixty mile level; having thus the delightful prospect not to be detained by going through numerous locks.

We were also _in limine_ of the far-famed lake region, and soon traversed one of the finest portions of New York State.

Passing the hamlets of York Mills, Whitesboro and Oriskany, the "Marguerite" advanced near to the city of _Rome_ towards 10 o'clock A.M. In its vicinity the famous battle of Oriskany was fought; and Fort Stanwix, which was besieged by the British in 1777, occupies a site now in the center of the city of Rome. The latter is laid out with wide streets well shaded with maples and elms. In the resident portion, a very high artistic taste has been displayed in the erection of dwelling houses. Although this thriving city of almost 16,000 inhabitants has not so many points of interest as its namesake, the ancient metropolis of the glorious Roman empire, whose wealth of antiquities is perfectly marvelous and whose relics of classical and papal times are alike almost innumerable; still it possesses one interesting feature that ought not to be left unmentioned: It was here that cheese was first made in factories.

Other important manufactures are merchantable iron, brass and copper, locomotives and agricultural implements.

Greatly favored by the clemency of the weather, we sped through this

beautiful region, which is a never ending source of interest to the tourist, sailing past New London, Grove Springs, Higginsville, Dunbarton, State Bridge, Durhamville, Lenox Basin, Canastota, New Boston, Chittenango, Bolivar, Pool's Brook, Kirkville, Manlius and Lodi. At the latter place the bed of the canal suddenly widens considerably, being about twice its average width. Entering that portion of the grand artificial waterway, we found its waters so shallow that we could plainly discern its rocky bed.

We entered the city of _Syracuse_ when the last streak of daylight had faded from the west and the blush on the waters was followed by the reflection of the far blue arch and its starry host.

Opposite the city hall, a magnificent structure, the "Marguerite" was made fast to repose after a fifty-five miles' course that day.

Syracuse, situated in the heart of New York State, has been appropriately named the "Central City." Its wonderful growth for the past twenty years entitles it to rank amongst the foremost cities of the East. It has a population of nearly 100,000, and is one of the leading manufacturing towns of the country. For a long period Syracuse practically controlled the salt product of the United States; in fact, it was that which first gave the place its importance. The existence of the vast salt springs of Onondaga was known to the Indians at an early date, and the secret was by them imparted to the Jesuits in 1654. The State took possession of the springs in 1794; and laws were passed for the conduct of the manufacture. Although numerous companies are now engaged in this industry, it constitutes a comparatively small factor in the commercial interests of the city, inasmuch as it possesses at the present time over five hundred industrial establishments; giving employment to not less than twenty thousand people.

The city is handsomely laid out, containing many fine public buildings and private residences.

When I came on deck the following morning the rain fell in heavy showers. A cloud appeared to open directly over our heads, and let down the water almost in one body, but at 7.15, as the violence of the rainfall had somewhat abated, we departed from Syracuse, sailing past Geddes, Bell'isle and Canton, where we struck another shallow place in the canal. As we approached Peru the mists were rolling away, which gradually, as they became thinner, received and transmitted the rays of the sun; illuminating them with a golden radiance, increasing every minute in splendor, until they vanished.

Therefore, it was a redoubled pleasure to glance at the green plains studded with yet greener woodlands; the little mountains raising their crests, and the lovely lakes gleaming like floods of molten silver.

Thus we journeyed along past Weedsport, Centerport, Port Byron, Montezuma, Pitt Lock, Clyde and Lock Berlin.

Nearly midway between Syracuse and Rochester, forty-nine miles from the

former city, we halted, choosing _Lyons_ for our night's lodging. The town, having a population of almost 6,000, is the seat of Wayne County, which produces more dried fruit than any other county in the State. The oil of peppermint forms an important product of manufacture, there being a score of peppermint distilleries yielding annually more than 100,000 pounds of this costly oil.

Thursday, the 27th of July, as the tints of a bright morning reddened the eastern sky, we pursued our journey, greatly delighted with the cool and refreshing atmosphere. Speeding along we passed Arcadia; Newark, a thriving town, numbering about 4,000 inhabitants; and Palmyra, seven miles beyond, with broad and well shaded streets.

Two miles south of _Palmyra_ Joe Smith, the founder of Mormonism, claimed to have dug from a hill, which now bears the name of Mormon Hill, the golden plates constituting the first Mormon Bible.

Sailing by the villages of Lower and Upper Macedon, Pittsford was reached; a beautiful town of more than 3,000 inhabitants and one of the oldest settlements in that part of the State. Here is located the famous "Pittsford Farm," which is one of the finest stock farms in the East. It is at this place that Shetland ponies, Jersey cattle and Angora cats are raised in great numbers. Uncountable varieties of water-fowl can always be seen at this point.

Having passed Brighton, we arrived at _Rochester_ long ere the first gold dye of sunset was stealing into the vast blue arch on high, having traveled forty-two miles that day.

Near the center of the city destined for our nightly abode, a multitude of curious spectators had assembled in order to view the handsome yacht. I made the observation that during our entire voyage the "Marguerite," wherever she made her appearance, was universally admired.

The important city of Rochester is situated on the Genesee River, seven miles south of its entrance into Lake Ontario. It is one of the leading manufacturing cities of the country, having more than 150,000 inhabitants. In 1802 it was founded by Colonel Nathaniel Rochester, a representative pioneer of the Genesee River Valley. In 1834 it received its charter as a city, and has since increased in population and importance with marvelous rapidity. The fertility of the surrounding country and the splendid water-power furnished by the Genesee River, together with unexcelled transportation facilities, have contributed largely to its growth.

Both in the latter part of the afternoon and evening, we deserted the yacht for the purpose of admiring the various beauties and points of interest, which give this town such a far spread reputation.

We received the conviction that Rochester, in fact, deserves its fame. Covering an area of about seventeen square miles, it is laid out chiefly in squares, with streets from sixty to one hundred feet wide, shaded by beautiful trees. It abounds in handsome and tasteful residences, which are for the most part surrounded by carefully tended lawns and gardens. Its

fire-proof office buildings and warehouses, are a credit to the city; only few, even in the metropolis, are equal to them in magnificence.

In the center of the city are the upper Falls of the Genesee, a perpendicular cataract of ninety-six feet, over which Sam Patch made his last and fatal leap.

To the prominent public institutions of Rochester belong the State Industrial School, two large hospitals, an Institution for Deaf-Mutes, and charitable organizations of every description. The principal business thoroughfare, Main Street, is in the heart of the city, and crosses the river over a handsome iron bridge.

The manufactures of Rochester are extensive and varied. In early years flour was the chief product, giving it the title "Flour City;" there being no less than eighteen mills within its limits. Rochester might be also appropriately styled the "Flower City," for its nursery trade is hardly surpassed by that of any other place in the world. The suburbs are highly cultivated, having 4,000 acres of fruit trees, and nurseries containing from 250 to 500 acres.

Other important industries are cotton and paper mills; oil refineries; boot and shoe, clothing, furniture, perfumery and tobacco manufactories.

A feature that attracts thousands of visitors daily, is the great Powers Art Gallery, the private property of Mr. D.W. Powers, occupying the greater part of the two upper floors pertaining to the Powers Building.

In fact, a plentitude of resources makes the city interesting to the tourist.

The next day, when "morn was blushing in the sky," we bade farewell to Rochester; and, sailing on the other sixty-mile level, we continued our journey through a charming region past Greece, Spencerport, King & Adams, Cooley's Basin, and arrived at the attractive village of Brockport. Beautifully situated in the midst of a country teeming with abundance and inhabited by a prosperous and contented population, it contains many features of interest. Here is located a State Normal School, and also several extensive manufactories of agricultural implements.

Passing Holley, Hulberton and Hindsburg, we came to Albion, the capital of Orleans County. The latter village is nicely laid out with wide streets and shaded by large trees. It contains many handsome residences and public buildings.

Having proceeded more westward, beyond Eagle Harbor and Knowlesville, we caught sight of the pleasant town of Medina, about midway between Rochester and Buffalo, noted for its quarries of dark-red sandstone. Located in the midst of a fine fruit country, it has the reputation of being one of the best fruit markets in the State. Speeding through the thriving villages of Middleport, Reynall's Basin and Cataract Springs, we neared a deep ravine, through which the Erie Canal passes, following a natural waterway. Here we met the most remarkable drop of the canal, in

its chain of five continuous double locks, resembling a flight of stairs.

Entering these, the "Marguerite" gradually rose higher and higher; and when quitting the last of them, she had been lifted up to an elevation of sixty feet by these five locks, and if we had not observed the busy hands working for our ascent, we might have been inclined to imagine that an invisible cloud was slowly carrying us to unknown regions on high.

We made _Lockport_ our resting-place for the night; since the sun had wheeled his broad disk already down into the west and the heavens were brightened only by the parting smiles of the day.

Going on shore, we visited Lockport, a prosperous city with about 20,000 inhabitants, which is the center of a large paper and pulp industry.

A five hours' journey on Saturday morning, July 29th, past Pendleton, Picardsville, Martinsville, Tonawanda and Lower Black Rock, completed our charming trip on the Erie Canal, which has from Schenectady to Buffalo a length of 323 miles.

The construction of this great artificial waterway, in all nearly 350 miles long, having an elevation of about 500 feet above tide water, made by seventy-two locks, was commenced in 1817, and its completion took place in 1825. Although this immense undertaking has caused an expense of \$50,000,000, the State of New York has made an excellent investment with that sum of money; since by means of the Erie Canal the domestic trade between the large western inland towns and the eastern seaports, especially the metropolis, is considerably facilitated. This traffic will receive a still greater importance, and can be more advantageously carried on, when the plan of utilizing the electric current for the driving power of canal-boats--a project recently tested by experiments--has been successfully executed.

Prior to 1857, this waterway was used for both trade and passenger transportation. Since the introduction of railroad communication, however, the canal has been the medium of conveying merchandise only; wherefore, our interesting trip on the steam-yacht "Marguerite" is one of a few exceptions to the ordinary routine of the Erie Canal.

CHAPTER II.

SOJOURN IN BUFFALO AND VISIT TO NIAGARA FALLS, FROM JULY 29TH, 1.30 P.M., TO AUGUST 2ND, 7 A.M.

It was a bright and sunny day; the atmosphere being purified by a strong but refreshing breeze. As the noonday sun poured his brilliant rays on the towering hills which adorn the luxuriant banks of the canal, it was announced that in the distance there could be discerned the dark line which indicated our approach to the verdant tract encompassing the thriving city of _Buffalo_, the terminus of our voyage on the Erie Canal.

While the boat was speeding along, this point upon which our attention was chiefly fixed, became more cognizable with every minute. Rising upwards to our left we could perceive domes of the most graceful proportions, towering structures, for number and form beyond my power to describe. On the other side, there lay spread before us, in vast expanse, the unrivaled water front which skirts the city of Buffalo, extending two and one-half miles along the shore of Lake Erie and two and one-half miles along Niagara River.

As we entered the harbor of Buffalo, which is considered the largest and finest on the lake, we were soon made acquainted with scenes and incidents that have no common fascination; in fact, one must be surprised at the tremendous amount of activity displayed here. The scores of huge grain elevators, having a total capacity of 8,000,000 bushels, and the mammoth warehouses lining the water fronts reminded one of New York and Brooklyn.

Large steamers and sailing vessels, of every description, are being loaded and discharged; powerful steam-hoists in operation on the docks; immense quantities of freight and merchandise in process of transfer to and from the railroad cars; and bustle everywhere; while hundreds of pleasure-boats and small crafts, of every conceivable variety, may be seen as far as the eye can reach. There we saw the trim and dainty shell, with its arrow-like prow, darting through the quiet coves; the saucy catamaran shooting, half submerged, out before the wind; the cozy little steam-launches, all ready to take their passengers to some suburban pleasure-ground; excursion steamers, with flying banners and bands of music going and coming, and mammoth propellers destined to carry thousands of tourists to the El Dorado on Lake Michigan's blue waters.

It will not be difficult to understand why Buffalo has attained commercial supremacy in Western New York, if you add to this never ceasing activity, betokening business, the enormous canal traffic; for it is here where innumerable canal-boats are weighted with the rich products of the west, carrying a large floating population of boatmen's families.

Before selecting our mooring place in Buffalo Creek, which can be navigated for about one mile, we sailed to the breakwater, a solid wall several feet high, having a length of 4,000 feet, which was erected at the expense of some millions of dollars for the protection of the city from being flooded by the unruly waters of Lake Erie.

While the tanks of the yacht were being filled with the limpid water of the lake, we ascended the stairs leading to the top of the protecting wall; for we all were anxious to become acquainted with the nature of the billows that were to carry us many miles westward and nearer to our far destination.

It was a glorious sight unfolded before our eyes. We glanced at a huge sheet of water, about 268 miles long, varying from thirty to nearly sixty miles in width, with an area of 9600 square miles, whose elevation from tide water is judged to be 564 feet.

This majestic spectacle, as animated as it was, imparted to us an adequate conception of a boisterous inland sea. The surface of the lake was in wild uproar; the advancing and retreating waves were beating themselves into angry foam, and dashed their spray pearls almost to our feet; their opulent azure hue being dimmed by the violent agitation. The inexperienced eye has no idea of the imposing impression caused by the extremely subitaneous changes to which these waters are subjected. The wide bosom of the lake that sometimes lies motionless and glassy, without a breath of air to cause the slightest undulation, in a very short time may be scourged by a sudden gale. The wild gambols of the waves, accompanied by the roar of the disturbed elements, may well cause the timid to fear; for, as the swell lifts, you would think the bases of the earth are rising beneath it; and, again, when it falls, you would imagine the foundation of the deep had given away.

Though the billows before us now were beaten by a powerful breeze, breaking with angry roar upon the barrier upon which we stood, yet not the slightest feeling of fear found place within our hearts. On the contrary, as we left the breakwater in order to return to Buffalo, I felt my heart palpitating with joy as I thought of the pleasing prospect to be tossed by those grand waves.

Having chosen a place at the foot of Main Street for our stay, the orders to secure the "Marguerite" were instantly carried out; and immediately a multitude of curious beholders had gathered around the yacht, viewing her with evident expression of admiration.

Since it was yet early in the afternoon we decided to go on shore, in order to view the points of interest in this important city.

A ride in the electric railway, traversing it in every direction, made us acquainted with a good portion of Buffalo, which contains a population of nearly 300,000, being the third city in size in the Empire State. It is handsomely laid out with broad and well shaded streets. One hundred and three miles are paved with asphalt, and 133 miles with stone. We saw many fine residences with attractive grounds, and numerous public squares. Delaware Avenue, the leading street for elegant mansions, is about three miles long, and is lined with a double row of trees.

The city possesses a superb system of parks and pleasure grounds, designed and laid out by Frederick Law Olmsted, the architect of Central Park in New York City. It comprises three sections, situated respectively in the northern, western, and eastern parts of Buffalo, which, with the connecting boulevard, afford a drive of nearly ten miles.

Main Street, the principal trading thoroughfare, has many substantial business blocks.

Of the prominent public buildings, the city and county hall deserves being mentioned in the first place. It is an imposing structure, of Maine granite, in the form of a double Roman cross, with a tower 245 feet high, surmounted by four statues. This magnificent edifice is fronting on Franklin Street, and was completed in 1880 at a cost of nearly \$1,500,000.

Other handsome buildings are the U.S. custom house and postoffice, at the corner of Washington and Seneca Streets; the Buffalo library, on Lafayette Square; the State arsenal, in Broadway; the Erie County penitentiary, one of the six penal establishments of New York; the general hospital, in High Street; and the State asylum for the insane, an edifice which cost about \$3,000,000, located in Forest Avenue, adjoining the Buffalo Park.

The city is also adorned with several handsome churches and theaters.

Buffalo was first settled by the Dutch in 1801, and became an important military post during the war of 1812. It was burned by a combined force of British and Indians in 1814. Its city charter was granted in 1832, and since then its growth has been very rapid.

As regards its live-stock trade, Buffalo ranks third among the cities in the Union, and its iron and steel works are next in importance to those of Pittsburg. The shipment of Pennsylvania coal, which finds a depot here, has been greatly increased in recent years; about 1,500,000 tons being distributed annually. The lumber trade is also large, but has been partly diverted to Tonawanda, ten miles below Buffalo.

The industrial works comprise four blast furnaces, large rolling mills, machine shops, car shops, iron ship-yards, stove foundries, tanneries, flour mills, and manufacturing of agricultural implements.

Early on Monday morning, I abandoned the land of dreams in order to appear on deck in good season; since arrangements had been made for going into dry-dock that very morning.

Reader, have you ever been there? I hear you answer negatively. Well, that is just what I expected; for it is a rather unusual and rare experience for ladies, even in the eyes of a shipwright, a man who is constantly employed in that place, that a boat enters the dry-dock with her passengers on board.

It was partly a matter of necessity, and partly of circumspection, that caused us to abide in the dry-dock for a few hours.

In consequence of the numerous low bridges that span the canal, the spars, rigging, and smoke-stack belonging to the complete equipment of the "Marguerite" would have made her journey on that artificial waterway absolutely impossible; therefore it was necessary to replace these parts in their appropriate positions.

The picture in the frontispiece gives evidence of that fact; as the "Marguerite" presented a very different picture completely rigged.

Now, on the point of sailing on the Great Lakes, it was requisite to dress the yacht in her proper array, with her high tapering masts; the cords of her rigging stretching from spar to spar with the beautiful accuracy of a picture; and so equipped, as to give her the appearance of a majestic, white winged sea-bird resting gracefully on the water.

For the purpose of bestowing upon her such an outfit, as well as for having her bottom examined, she was docked in Mill's dry-dock. The latter motive, I must add, was effected by a mere act of precaution; since no components of the propelling machinery had been injured or damaged.

But Mr. James, our ever thoughtful commodore, wished to be assured that he could direct the "Marguerite" on her westward course with everything pertaining to her in complete order.

These docks may be in communication either with a wet dock or a tidal harbor. I observed that the dry-dock we entered had a pontoon gate, floated in or out of place as desired. There being no tides in the lakes, this style of gate--less liable to leak under continuous pressure--is invariably used; for the only method of emptying the docks here is by pumping, for which purpose a steam-engine and pumps, with a well and water channel leading to it, were employed.

We scarcely had made our entry into it, ere many busy hands worked to give the keel of the yacht a secure rest on wooden blocks which were fastened down to prevent them floating. They were of such a height as to permit the shipwright getting under the vessel's bottom. Then side shores were put in to keep the boat in an upright position. This being accomplished, I could notice that the pumping machinery was brought into full operation. Soon I found that the level of the water became lower and lower, and after the expiration of about one-half hour the dock was almost dry.

The sides of the dock generally consist of stone steps--called altars--for the purpose of fixing the lower ends of the shores, and also for the convenience of supporting the workmen's scaffold.

Mr. James and family, including myself, left the yacht to the crew and workmen, while we further explored the city of Buffalo in carriages, thoughtfully provided for us.

The day after our entering dry-dock, August 1st, was eventful, as it was arranged we should make an excursion to view one of Nature's greatest wonders--_Niagara Falls_--a sight unlike any other on the surface of the globe. The indescribable grandeur of the whole overwhelms the soul--to contemplate that tremendous torrent which never stops! No rest in the ages of the past--no promise of a moment's stay in all the years to come--but on, on, with resistless force!

Our thoughts become like the mists that rise above this awful scene, and we are mute--Pigmies of an hour! To feel that after what we are becomes a little dust, that solemn roar will echo in the ears of millions now unborn!

Though I had read diverse descriptions portraying the grandeur and magnificence of Niagara Falls, still I was aware that they had failed in conveying a clear and succinct outline of their wonderful proportions and great sublimity. My conclusions that, in order to be properly appreciated these gigantic cataracts must be visited, were confirmed, and, *_re vera_*,

when once viewed the recollection of that glorious sight will linger long in memory.

An hour's ride in the cars brought us to the village of Niagara Falls, a splendid manufacturing point, having all modern improvements and unsurpassed railway facilities of various kinds. The village was incorporated in 1848, and has about 4,000 inhabitants.

The average annual number of visitors to this beautiful place is estimated to be 400,000.

At the station of Niagara Falls, Mr. James engaged vehicles which afforded accommodations for all of us--a party of ten--including the steward, who accompanied us, carrying a bountiful repast.

The drivers of Niagara Falls are excellent _ciceroni_. We drove through the handsome village to Prospect Park, a property owned by the State of New York, and included in the Niagara Reservation, which the State acquired by purchase in 1885. All the unsightly buildings, heretofore obstructing the view, have been removed, and a terrace was erected for a distance of half a mile, affording uncountable attractions to the visitor with its venerable trees, comfortable seats, and delightful views.

The main entrance is a tasty structure at the foot of Cascade Street. The point of land at the brink of the falls is called _Prospect Point_. Since it commands a fine view, which is the feature of the park, our drivers advised us to abandon the carriages and to step nearer to the long stone wall running for some distance along the edge of the gorge.

Standing on the platform, I glanced at the mighty volume of water; here precipitated over a huge rock 163 feet high with a thunderlike roar that can be heard, under favorable circumstances, a distance of fifteen miles.

For a long time we remained there, spell-bound by the wonderful panorama, plunged into a reverie of rapture. Mrs. James, reminding me the carriages were waiting for us, brought me back to consciousness.

The spectacle is so sublime and overwhelming that the mind, unable to grasp it, cannot adjust itself at once to a scale so stupendous, and the impression fails. But, gradually, as you remain longer, the unvarying, ponderous, unspeakably solemn voice of the great flood finds its way to the soul, and holds it with a fascination which is all pervasive and cannot be shaken off.

In a car, moving on an inclined plane, we descended to the water's edge. These cars are raised and lowered by water-power, by means of a three-inch cable 300 feet long, running over steel wheels.

At the foot of the stairway, tickets may be obtained for the trip on the "Maid of the Mist," that steams up to the Horseshoe Fall; then back to the Canadian side, and finally returns to her starting point.

The view from below presented to us new charms which we could not obtain

before. In the first place the enormous height of the cataract may be better realized from beneath; then the emerald and opal translucence of the waters, as they pass in their swift career, was here especially effective; since the sun, shining through the mists of spray from a station in the heavens most advantageous for our prospect, crowned the entire scene with iridescent diadems. This fall is known as the American, separated from the "Horseshoe" or "Canadian Fall" by a large island, standing on the verge of the cliff over which the cataract pours, and dividing the river in such a manner as to form from its waters the two above named falls.

After a lovely ride through the beautiful woodland we viewed Goat Island, having an area of 61-1/2 acres and a circumference of about one mile. A strip about ten rods wide and eighty rods long, has been washed away on the south side since the first road was made in 1818.

This island was, in ancient times, one of the favorite burying-grounds of the Indians, and yet preserves traces of their funeral rites.

Crossing the first bridge, from which we had one of the grandest views of the rapids, we reached Bath Island, some two acres in extent. A second bridge conveyed us to Goat Island, where we witnessed a most charming panorama. Descending the stairs, we stood next to the Little Fall, beneath which is the famous Cave of the Winds.

From the farther point of Luna Island, attainable by a little bridge, we saw the most desirable near view of the American Fall and Rapids; here, too, we enjoyed a fine spectacle in the perspective of the gorge below.

It has often been remarked by strangers that this island trembles, which is undoubtedly true, but the impression is heightened by imagination.

Not far from Luna Island are the famous Biddle Stairs. Shortly after their erection, in 1829, the well known Sam Patch, whose diving propensities made his name illustrious, performed his noted, bold feat in 1830. Midway between the foot of these stairs and the Canadian Fall he built a scaffold, ninety-six feet high, from which he made his successful leap into the river.

Proceeding a little further, we stood in full view of the Horseshoe Fall--so-called because of its crescent shape--which contains by far the greater body of water; the fall being more than 2,000 feet wide and 154 feet high.

The site of the old Terrapin Tower is the best point from which to perceive the shape of the fall.

From the south side of the island the Three Sister Islands are accessible, affording the finest views of the rapids. These islands offer, from their location, a delightfully cool retreat in the warmest summer days, with attractive and enchanting scenery.

In order to have a comprehensive glance of Nature's grandest wonder known

to man, in its climax of sublimity, we took a ride back through Prospect Park, across the New Suspension Bridge, below the American Fall, to the Canadian shore. This splendid drive was continued through the Queen Victoria Niagara Falls Park, opened to the public in 1889.

Following the example of New York State, the Ontario Parliament had passed an act to reserve the western side of the Falls vicinity--the Canadian Reservation--covering an area of about 154 acres, and beautifully laid out.

Here we had the most imposing view; a finer panorama cannot well be imagined.

The concussion of the descending waters with those in the depths below occasion a spray that veils the cataract two-thirds up its height. Above this everlasting and impenetrable foam, there rises fifty feet above the fall a cloud of lighter spray, which, when the rays of the sun are directed upon it, displays solar rainbows, grand in their magnificence.

It was here on Table Rock, formerly one of the most celebrated points about Niagara, that Mrs. Lydia Huntley Sigourney wrote her spirited eulogy on Niagara, which commences with the musical rhymes:

"Flow on forever, in thy glorious robe
Of terror and of beauty. Yea, flow on,
Unfathomed and resistless. God hath set
His rainbow on thy forehead, and the cloud
Mantled around thy feet. And he doth give
Thy voice of thunder power to speak of him
Eternally,--bidding the lip of man
Keep silence,--and upon thine altar pour
Incense of awe-struck praise."

Three miles below the falls is the Whirlpool, a vast basin formed by the projection of a rocky promontory on the Canadian side, against which the waters rush with such violence as to cause a severe reaction and rotary motion; and in it logs and trees are frequently whirled around for weeks in succession.

Geology has accepted as a matter of certitude that within the memory of men now living, the Falls have receded 100 feet, and authorities in that science have stated the fact, that the retrocession--estimated from one inch to one foot per year--began near Lewiston. The whole waters of the lakes there foamed over this dam several miles in width.

The name "Niagara" is supposed to belong to the vocabulary of the Iroquois language, meaning "Thunderer of Waters."

The first white visitor to Niagara Falls was Father Hennepin, a priest and historian, accompanying Chevalier Robert de la Salle on his discoveries. He published the first description of "this wonderful Downfall" in 1678.

There exist now three distinct cataracts, which are known as _Horseshoe_,

American, and _Central Falls_. The weight of water descending over the cadences in a single hour, is computed to be 100,000,000 tons.

The magnitude of the great waterfalls, and their fame as a natural wonder, had, heretofore, to a certain degree, excluded from thought the idea of their marvelous utilitarian properties; but the recent development of electrical science, and the far-reaching enterprise of to-day, have now combined to subject to the uses of mankind a portion of the power of the falls, developed at such a distance from the great cataract as not to interfere in any way with the natural beauty of the scenery.

As the western sky was dyed with the tints of sunset, we hastened to reach our floating home; since we expected two friends of Miss Campbell on board the yacht--a gentleman who holds a prominent position in Buffalo, Mr. J.B. Seitz, and his charming wife. We returned with the exalting sentiment of having visited a temple of nature, to whose shrine thousands from all over the world annually pay their tribute of praise.

Arriving on board the "Marguerite" that--though still in dry-dock--was not laid dry any more, we perceived a striking contrast between the close and saturated atmosphere prevailing here, and the pure, balmy air at Niagara Falls.

Our thoughtful commodore, desirous of giving us the opportunity to inhale the refreshing sea-breeze, ordered our departure for the breakwater as soon as circumstances permitted; intending early on the following morning to commence our lake journey. The obscurity was fast increasing as we neared the high stone wall, and the scenery around me made the verses of Whittier resound in my ears in which he described the "Evening by the Lake Side" so beautifully with the words:

"Yon mountain's side is black with night,
While broad-orbed, o'er its gleaming crown
The moon, slow rounding into sight,
On the hushed inland-sea looks down."

CHAPTER III.

VOYAGE ON THREE GREAT LAKES, FROM AUGUST 2ND, 7 A.M., TO AUGUST 22ND, 9 A.M.

As the warm rays of the morning sun were lighting up the scene with a radiance, glorious to behold, we bade farewell to Buffalo which, being already in some distance, soon became entirely invisible.

Indescribable was our amazement when we viewed once more the waters of _Lake Erie_, whose raging billows had betrayed to us, only a few days ago, the unruly nature of a boisterous inland-sea.

Now, as we were gliding on its surface, the lake presented an appearance

quite novel to us; being almost motionless, a true emblem of tranquillity and peacefulness. Only now and then a gentle zephyr rippled its level which, reflected in the sunbeams, appeared like an undulating mass of silver. The cloudless heavens, clad in their brightest hue of azure blue, and illumined by the golden sun, painted a great variety of fine images of light and shade on the limpid waters beneath. The sky seemed to reflect the water and the water the sky, both gleaming in the sunshine.

On our right, the lake made the impression of stretching into endless, unlimited space; on our left, however, we could distinguish romantic hills, decorated by massive groves, with crossing and intersecting promontories, and fair valleys tenanted by numerous flocks and herds, that seemed to wander unrestrained through the rich pastures. The luxuriant landscape was intercepted here and there by undulating slopes, covered with sand, whose light color contrasted with the verdure of vales and hillocks.

Speeding along, we came abreast of Dunkirk, a lake-port town in Chautauqua County, N.Y., situated on a small bay in Lake Erie, forty miles southwest of Buffalo. The town, which has a population of over 5,000, occupies an elevated and favorable position on the lake. Its industries comprise oil refineries, and the manufacture of flour and iron-work.

After proceeding on our voyage for some hours, we viewed--located in a natural bay--the harbor of Erie, the capital of Erie County, Penn. The port is protected by a breakwater three and one-half miles long.

The principal shipments that leave this harbor, are coal, iron, and petroleum; an important trade being carried on with the Canadian lake-ports.

The streets of the city are spacious and laid out with great regularity. To its prominent buildings belong the postoffice, the opera house, the city hospital, the court house, and the orphan asylum. Erie contains nearly 20,000 inhabitants, many of whom are engaged in iron manufacture. The large supply of water required for the factories is obtained from the lake by powerful engines, which force it to a tower 200 feet high, whence it is distributed through the mains. The chief industries developed here, are petroleum refineries and leather factories.

It was at Erie, that Commodore Perry equipped the vessels which in 1813 defeated the British fleet on Lake Erie. In the year 1795 the town was laid out, and in 1851 it received a city charter.

Still fascinated by the attractions of the everchanging landscape along the southern coast, we had forgotten that fugit hora; for we were greatly surprised to perceive the approaching twilight, indicating the parting day, and the white beams of the young crescent just beginning to steal over the lately flushed and empurpled scene.

Therefore, the "Marguerite" was cabled to the dock, about two miles from the village of Conneaut.

A fresh and palpitating evening air invited us to a walk along the coast of the beautiful inland-sea. Adopting an unfrequented path through a vast plain of sand, we found the charming scenery enhanced by a solemn stillness. All nature slumbered.

Here, witnessing a magnificent prospect in this lovely solitude, we experienced one of those seasons when the atmosphere is so surcharged with luxury, that every pore of the body becomes an ample gate for sensation to flow in; and one has simply to sit still and to be filled.

Seated near the shore, we delivered ourselves up to the exquisite loveliness around us; and when returning on board the yacht, the impression of the superb panorama tarried with me, even into the realm of Morpheus; so that I rose on the following morning with the remembrance of delicious dreams.

When I came on deck, the air seemed to be sweet with perfumes; the water sparkled brightly, and the blue sky hung cloudless over the placid mirror of Lake Erie.

Thus, favored by the weather, the majestic steam-yacht resumed her voyage.

After the lapse of two hours the harbor of Ashtabula came in sight, and at about 10 o'clock we approached Fair Point. The noon-tide of the summer day was past, as we were made acquainted with the fact, that the rising towers and pinnacles, to be discerned in the distance on our left, pertained to the beautiful "Forest City," next to Cincinnati the largest and most important city in the State of Ohio.

Cleveland is built on both sides of the Cuyahoga River, which is here crossed by several bridges. It is located chiefly on a plain from fifty to 100 feet above the lake, of which a magnificent view is thus obtained.

Leaving East River Street, where our floating home was destined to remain, I undertook an excursion through the greater portion of the city; not solely for the purpose of viewing the regular streets, generally from eighty to 100 feet wide, and lined with maple trees, but with the design to see a friend--Miss Lina Uhl--a teacher in one of the thirty public schools; holding a prominent position as the president of a teachers' association in Cleveland. She is the niece of Mr. C.F. Hild, from Schenectady, N.Y.

Having previously informed her of my intention to visit her native city, I was already expected, and very cordially received at her hospitable home.

After I had spent some very pleasant hours there, my friend accompanied me on my return to the dock. _En route_ she made me acquainted with many points of interest, which are so numerous in the "Forest City." Thus, she called my attention to the charming Euclid Avenue, a street several miles long, considered to be one of the most extensive and picturesque within the limits of the United States. Here Cleveland's aristocracy built their substantial mansions and luxurious villas, encircled by tasty, park-like gardens. Of special interest to the visitor is the monument erected in

memory of James Abram Garfield, the twentieth president of the Republic, born in Orange, Ohio, in 1831. Being in office but a short time, he was shot by a disappointed office-seeker, Charles J. Guiteau, in 1881. This sad event, which forms a thrilling incidence in the history of the Union, is comparable with the recent death of Carter Harrison, mayor of Chicago, whose assassination by Prendergast, under similar circumstances, on Saturday, 8.30 P.M., October 28, 1893, created a profound sensation and great excitement.

Monumental Park, near the center of the city, contains ten acres, divided into four squares by the extension of Ontario and Superior Streets. Besides a fountain, and other attractive objects, the park is adorned by a statue of Commodore Perry, erected in 1860 in commemoration of his victory on Lake Erie in 1813. It is of Italian marble, eight feet high, and stands upon a granite pedestal twelve feet in altitude. The most noteworthy buildings are the postoffice, the city hall, the county court house, and the Cleveland medical college. The Union Railway depot, an immense structure of stone near the lake shore, is one of the largest of the kind in the United States.

Cleveland was founded in 1796, and named in honor of General Moses Cleveland of Connecticut, who then had charge of the surveying of this region. It was an important point in the war of 1812, incorporated as a village in 1814, and as a city in 1836. The number of its inhabitants is estimated to be more than 200,000. The "Forest City" has an extensive trade in copper and iron ore, shipped from the Lake Superior mining regions, as well as in coal, petroleum, wool, and lumber, received by railroad, canal, and lake transportation. A sojourn of at least one week is requisite in order to acquaint one's self with all the attractions of Cleveland, with its unrivaled position and manifold beauties of scenery.

In fact, our honorable President can be proud to share his name with this delightful place; and, in return, the "Forest City" may consider it an honor to be the namesake of Grover Cleveland, the present leader of the powerful Republic.

On Friday morning, as soon as the dawning day dispatched its first rays over Cleveland, we resumed our voyage on Lake Erie. The flakes of light were falling every moment faster and broader among the spires and towers of the city of which we gradually lost sight. They were only discernible as long, gray shadows on the elevated lake shore. The mists were couched in quiet masses, iridescent with the morning light, upon the breasts of the remote hills, over whose leagues of massy undulations, they melted into the robe of material light, fading, lost in the increasing lustre, again to reappear in the higher heavens, while their bases vanished into the unsubstantial and mocking blue of the lake below. The dispersing wreaths of white clouds gradually gave place to the pale azure of the horizon. The level of the beautiful inland-sea was bathed in the glorious sunlight and the whole heaven--one scarlet canopy--colored the limpid waters with an exquisite, roseate tint; thus giving a redoubled splendor to this fine panorama.

While the midday sun was sending forth his warm rays, we came abreast of

Marblehead, and speeding along we reached Green Island at 1 o'clock.

Having passed Barr Point Lighthouse we chose our halting place on the Canadian shore near Amherstburg, a small village pleasantly situated on the Detroit River.

As the yacht was fastened to the dock, the heavens were yet illumined by the parting day; which gave us opportunity to admire the superb spectacle on the opposite shore. Its southwestern extremity was adorned with numerous verdant islands of various size and form; some stretching for miles in length--the largest containing a circumference of fourteen miles; several so small that they seemed destined for a race of fairies; others in clusters; and some like beautiful vestals, in single loveliness, whose holy vows ordained them forever to live alone.

The last streak of light had faded from the west, and a pale lustre kindling in the eastern portions of the sky, became brighter and brighter till the white falcated moon was lifted up above the horizon; while uncountable stars appeared to reflect their brilliancy in the waters below. This delightful scene around us, so perfectly filled and satisfied our sense of beauty that we reluctantly gave up our comfortable seats on the stern-deck, notwithstanding an advanced time of night.

On the following morning the sun rose in his clearest splendor. As soon as that flood of luminous rays which constitutes day, was flowing on the crystalline sea, we departed from this romantic country scene in Canada.

Sailing along, we approached the terminus of our voyage on Lake Erie, which is considered the most dangerous of all the Great Lakes as to navigation, owing to its comparative shallowness--its mean depth, being about ninety feet--and the consequent liability to a heavy ground swell. The peculiar features of this body of water are its inferior depth and the clayey nature of its shores, which are generally low; on the south, however, bordered by an elevated plateau, through which the rivers have cut deep channels.

Though the lake possesses but a small number of good harbors, the amount of traffic on its waters, and on the connecting railways is enormous.

This inland-sea, presenting us only sights of utmost quietude and peace, has been the scene of a naval engagement between the British and Americans, September 10, 1813, in which the latter were victorious. The view we enjoyed was not in the least adequate to remind us of warfare; on the contrary

"The sun in heaven shone so gay:
All things were joyful on that day."

It was yet early in the morning when we neared the city of Detroit, having almost reached the head of Detroit River which separates the United States from Canada. Being about one-half to three-quarters of a mile wide, and five and one-half fathoms deep, the river flows with a pretty swift current.

Detroit is the most important city of Michigan, opposite the Canadian town Windsor.

Eighteen miles north of Lake Erie, it stretches with its suburbs about five miles along the river, and the central part extends for about two miles back from the shore. Approaching the city, we were more and more delighted with its attractive appearance. The streets, from fifty to 100 feet wide, are for the most part ornamented with rows of trees. A number of avenues, having an unusual width, diverge from the Grand Circus, a spacious park semi-circular in form, which is divided into two quadrants by Woodward Avenue. Connected with the former is the Campus Martius, a public place about 600 feet long and 250 feet wide. Detroit comprises many magnificent structures. One of the chief public buildings is the city hall, facing the Campus Martius, with fronts on four streets. It counts among the finest edifices of the kind in the west. Built of sandstone, it is designed after the Italian style of architecture, surmounted by a tower 180 feet high. Its cost amounted to \$600,000. Other prominent structures are the opera house, the office of the Board of Trade, the custom house, and the Roman Catholic cathedral.

The commercial facilities of the city are very extensive. The Detroit River is a connecting link in the great chain of lake navigation, and affords the best harbor on the inland-seas. Detroit is not only the center of a great railroad system; more than 350 vessels are owned here, and numerous daily lines of steamers run to various points of the lakes. Its manufacturing industries are very important and consist of iron, flour, tobacco, cigars, lumber, and bricks. The extensive Pullman Car Works are situated here; also one of the seven pin factories in the United States.

Settled by the French, early in the eighteenth century, Detroit passed into the hands of the English in 1763. It was then besieged for eleven months by the Indian chief Pontiac; ceded to the Americans in 1783, but not occupied by them till 1796. As a city, it was incorporated in 1824; and its present population is estimated to be 235,000. It was the capital of Michigan from 1837 till 1847, when that honor was transferred to Lansing.

Having traversed Detroit River, we entered _Lake St. Clair_, a sheet of water eighteen miles long and twenty-two miles wide. This small lake has many extensive sand-banks covered with a depth of water varying from six to ten feet. Previous to 1858, much inconvenience was experienced in navigating it, owing to the insufficient depth, but the governments of the United States and Canada have dredged a canal through the bed of the lake, comprising a width of 300 feet. Since then, this channel has been deepened so as to enable vessels drawing fifteen feet to pass with safety from lake to lake in stormy weather.

After the expiration of a few hours we reached _River St. Clair_, whose luxuriant border exhibited a magnificent panorama.

Afar off westward, the uplands wore a tinge of tenderest blue; and in the nearer distance, on the low shores of the river, superb summer residences,

tasty villas, and elegant hotels, built in every style of architecture, lay interspersed between romantic hills and tufted groves. The horizon was of a fine, golden tint, changing gradually into the deep blue of the mid-heaven.

None of us ventured to leave the deck fearing to miss some of those unrivaled sights constantly offering new attractions.

This trip on River St. Clair--though having an extent of thirty-three miles--seemed but short to us; and the fine spectacle displayed on the charming western bank may be reckoned among the most delightful scenes we beheld on our long, enjoyable voyage.

As we approached the terminus of the river, a sudden rush of the awakened wind was heard; and out of the blue horizon a troop of narrow, dark, and pointed clouds were advancing, covering the sky, inch by inch, with their gray masses gradually blotting the light out of the landscape. Horizontal bars of black shadow were forming under them, and lurid wreaths wrapped themselves about the crests of the hills. The wind had grown more violent as _Port Huron_ came in view. Waving curtains of opaque rain, swinging from the overburdened clouds, dropped down upon the surface of the river. The black swaying fringes, sweeping irresistibly along the water, churned the surface into foam.

The sudden and unfavorable change of the weather determined our commodore to abide at _Port Huron_, a prosperous city in Michigan. It commands a very advantageous situation, located on the west bank of River St. Clair, and at the southern extremity of Lake Huron.

Being the county seat of St. Clair County, it is also a point of great importance in the railway system, and the terminus of several lines of lake steamers.

The city, with a population of nearly 14,000, has a large lumber trade, ship-yards, dry-docks, saw and flour mills.

Founded in 1819, Port Huron was incorporated as a village in 1835, and as a city in 1857.

Since the yacht lingered here until Monday, August 7th, we were enabled to become familiar with its broad streets, regularly laid out and well shaded; some adorned by beautiful private residences. The heavy, black clouds that had shrouded the whole sky ever since we made our entry in Port Huron, were yet concealing the golden disk of the summer sun. The atmosphere, however, which had previously a disagreeable, wet chilliness in it, gradually grew clearer and warmer so that we left the dock with the intention to undertake our voyage on Lake Huron, but when nearing the place where this sheet of water, covering an area of 23,000 square miles, communicates with River St. Clair, we discovered that the swell on the lake level was yet quite considerable, whereas the wind which had blown a gale all the preceding day, was gradually dying away.

Still, we found it advisable to wait until the foaming waves of the

enraged element had been appeased. In consequence of this decision we concluded to moor the yacht as near the entrance of Lake Huron, as we conveniently could, ready for an early departure; for which we considered the town of Sarnia, opposite Port Huron, the most favorable locality.

Romantically situated on the Canadian shore, Sarnia affords a splendid north and west view. Its handsome streets and neat structures are quite attractive to the stranger; and not these alone but also the residents who are generous and hospitable. We observed this fact, even during our short stay, when receiving the visit of Mr. Clark and his amiable lady, who presented us with a bouquet of fragrant flowers, a kind gift that we highly appreciated.

Long ere the east became purple with the morning light and the pinnacles of Sarnia were bathed, one by one, in the glory of its burning, we departed from the pleasant city, and the white sea-bird "Marguerite" spread her light wings over the surface of Lake Huron, whose waves--although the wind was quite fresh--did not run as high as I anticipated; for I had been informed that on the previous day the tide from the lake into Detroit River amounted to eight miles an hour.

As I was pacing up and down the deck, I viewed an inland-sea 270 miles long, and 105 miles broad, with a picturesque coast line on our left. The purity of its waters was discernible by its limpid appearance and savory taste. The fine deposits of sand and clay extending at different places along the shore to a distance of twenty miles inland, by their contrasts added to the scenic beauty, exhibiting a variety of magnificent views.

The luxuriant coast bordering on the southern extremity of the lake and skirting the peninsula of Michigan and southwestern Ontario--though comparatively flat--is not void of charming features; being lined with numerous pretty villages imbosomed among gentle slopes that were covered with the richest verdure. These hamlets, situated in the quiet valleys and shaded glens, alternated with extensive fields and orchards exuberant with fertility.

Speeding along on the wavy surface of the lake, we gained sight of the breakwater of Sand Beach when the noon-tide of the day had not yet arrived.

We first visited the village of Sand Beach, and returned at nightfall to the breakwater, which is five miles distant from the former; here the yacht was cabled to the dock. Near our halting place there stood a lofty tower, whose illuminating apparatus threw a radiant, vari-colored light on the dark surface of Lake Huron.

Upon expressing a desire to visit the Light Tower, Mr. James, who never left any of our wishes unfulfilled, immediately made arrangements with the keeper; and, accordingly, we were invited to intrust ourselves to his guidance.

He informed us that the structure rested on a foundation consisting of a concrete mass, nine feet below the water line. Having ascended four

flights of iron-wrought winding stairs, we reached the top of the circular structure; it having a diameter of twenty-four feet at its base, and rising to an elevation of fifty-seven feet.

With great interest we inspected the revolving lights, exhibiting an ingenious piece of machinery, the invention of Finisterre and Barren in Paris, and representing a value of \$1,800. This apparatus for rotating lamps is far superior to that for a fixed light.

The characteristic of the latter is to constantly illuminate the whole horizon, requiring all the rays to fall simultaneously on the navigable track, whereas the demands made of a revolving light, are not nearly so great; only each point of the horizon being lighted at successive periods.

When the dark intervals occur, the rays from the flame which are then pointing toward the obscure spaces, have their direction so altered laterally as to pass into the adjoining bright places; and so increase the power of the luminous flashes. A revolving light, though supplied by a flame of the same strength as a fixed, will thus necessarily be raised to a higher degree; for it does not lose its power by diffusing the rays constantly over the whole horizon, but gathers them up into a number of separate beams of greater intensity.

The lights made to revolve by means of clockwork, were fed with mineral oil, a refined kerosine; and the refraction was caused by highly polished metallic reflectors.

This visit to the Sand Beach Beacon was quite instructive; since we viewed there a practical application of an important principle in optics, based on the reflection of light.

On Wednesday morning, the first beams of the new-born day had just appeared, when the yacht continued her voyage on Lake Huron. After a course of nearly twenty-two miles, we approached _Saginaw Bay_--the largest indentation on the western lake shore--comprising a width of thirty miles and a length of sixty miles.

The passage across this bay, feared by many experienced navigators on account of the heavy ground swell, did not give us any cause for anxiety at first. Gradually, however, the sea became quite rough, and the enraged waves dashed their spray pearls even upon the deck of our sailing home.

"The soft, wild waves, that rush and leap,
Sing one song from the hoary deep:
The south wind knows its own refrain,
As it speeds the cloud o'er heaven's blue main."

The strong breeze springing up in the forenoon, increased at midday. A line of low waves, first creeping sinuously into the bay, and tossing their snowy crests like troops of wild steeds, rolled higher and higher with the noise of many waters; and to escape the wrath of the angry sea, we stopped at the harbor of _Tawas City_, located near the northern extremity of Saginaw Bay. It is a thriving country town, with about 1,000

inhabitants, largely engaged in lumber trade.

The wind continued to lash the fierce billows during the day until evening; so we decided to remain in Tawas City until the dawn of the next morning.

Guided by the pale light of another aurora, we resumed our voyage, finding the surface of Lake Huron still in uproar.

During this forenoon, we had occasion to witness a prospect quite novel to us. Glancing to our left, on Michigan's sylvan shore, we saw the bickering flames of a ravaging forest fire; dyeing all the surrounding air and landscape crimson, while dense clouds of smoke hung over the burning land like a pall upon which the sun-rays were reflected with weird effect. It was, indeed, an unusual sight, exhibiting strange beauty and splendor.

In a short time we experienced the disagreeable consequences of this conflagration in the woodlands, caused by the extreme dryness prevailing in these regions for several weeks. For, as we reached _Alpena_ in Michigan, at about noonday, we found the atmosphere completely saturated with smoke, and intermixed with particles of burnt material.

The reader can easily imagine that this impure air had a very unpleasant effect upon our eyes, irritating them so as to materially interfere with our comfort. This was the reason why we did not duly appreciate the attractions of Alpena, a town with about 12,500 inhabitants, regularly laid out with nice, broad streets, containing many handsome buildings and large stores.

We had an ardent desire to bid farewell to the city as quick as possible; wherefore our captain received the order from Mr. James to guide the yacht forward on her course, even before the dawning of the next day, if such an early departure could be effected with safety.

In compliance with these commands, we were on our way long ere the blush of day tinged the eastern sky. At first, disregarding the smoke and mist which became denser every minute, our navigator was soon aware that

"So thick a haze o'erspreads the sky,
He cannot see the sun on high:
On deck the captain takes his stand,
So dull it is, he sees no land.
'Dear me,' he says, 'I know no more
How far away we are from shore."

The fact is--that on account of the dense pall of smoke and mist, overshadowing everything--our pilot lost his reckoning, and only kept the yacht slowly moving through the water until we could find our way, when suddenly--we ran aground upon a rocky ledge, causing us all great consternation.

"No stir in the air, no stir in the sea,
The ship was as still as she might be.

Her shaft and screw received no shock.
Her keel was steady on a rock."

Having lost all presence of mind, our pilot, without any meditation, abandoned the yacht in one of the small boats, for the purpose of obtaining assistance from the unknown shore. Before we were conscious of his proceedings, he had disappeared through fume and haze. Almost instantaneously we detected that the mariner's compass had vanished with him.

Thus, we were destitute of the most important instrument for navigation. Wishing to give our deserter opportunity to find his way back to us, we caused the whistle to resound at short intervals.

This interesting adventure was, of course, thoroughly discussed. We were all convinced that the unforeseen event might turn into a perilous one, should a wind arise to roughen the surface of the water.

Our conversation was interrupted by an involuntary cry of pleasure which burst from the lips of Miss Campbell, whose keen eyes had revealed to her quite an uncommon spectacle in the hazy distance. Following her direction, we spied, through the fluctuating light of the foggy morning, the outlines of a steadfast boat speeding along on the calm sea. Eight oars, managed with the accuracy of clockwork by eight strong and skillful hands, were hurrying toward our rock-bound craft.

As the shape and dimensions of the capable boat became discernible, it was evident she belonged to the United States Life-Saving Service, coming to our rescue. This conjecture was correct, for the robust crew soon lay alongside of us; which was a matter of intense relief to the whole party.

With their assistance, the yacht was soon afloat again; and, guided by the Thunder Bay crew, we sailed to a favorable place of anchorage between Sugar and Gull Islands. Here the yacht remained to await our fugitive pilot, who was restored to us by the kind services of the life-saving crew, a few hours afterwards.

We were informed that we had been aground two miles from the shore, in the vicinity of Thunder Bay Lights on Gull Island Ledge.

During a heavy shower in the afternoon, we received a visit from several very pleasant ladies, relatives to the captain of the Thunder Bay life-saving service.

When expressing our regret that their excursion was not favored by pleasanter weather, they assured us they were only too glad to view the tremulous skeins of rain refresh the languishing earth. In fact, this rainfall was a duplicated blessing, as it not only cleared the atmosphere from its smoky shroud but helped to check the ravages of the extensive forest conflagration, then threatening the city of Alpena with destruction.

An awakened breeze, which had freshened since the violent shower, caused

our floating home to roll considerably.

Not desirous of being rudely tossed by the wanton billows, we weighed anchor and returned to Alpena, the only safe harbor within reach before sunset.

Early the next day we continued our voyage on Lake Huron, entering its northern portion, which differs greatly from the nature of its southern shore.

The northern and northeastern coasts are mostly composed of sand- and limestones. Where metamorphic rocks are found, the surface is broken and hilly, rising to elevations of 600 feet or more above the lake; in this respect unlike the southern shore, which is low and flat. Of the many islands--whose number amounts to about 3,000--we could admire the beauties of but few; for most of them dot the Canadian coast line.

As the wind increased rapidly, it was deemed advisable to take harbor at _False Presqu'ile_, where we arrived at 9 A.M. Although this small body of land appeared very insignificant, inhabited by only twelve families, we decided to remain there, until wind and waves would prove more favorable.

We had no motive to regret that resolution; for we experienced that this solitary tract not only afforded us enchanting views of lovely scenery; it was also the abode of noble-hearted mortals. Immediately after our arrival a very amiable gentleman, introducing himself as Mr. W.A. French, a wealthy lumber merchant of this place, visited us on board; giving us a cordial welcome. Not satisfied with a kind reception, he and his pretty wife presented us with all sorts of provisions, indigenous to this locality; thus evincing the abundant supply of delicacies at their disposal, notwithstanding their residing in such solitude.

The time passed with marvelous rapidity in the pleasant company of our new friends. When the gloom of the growing twilight reminded us of the fading day, we could hardly realize this fact. We wished to stay there another day; but when the following morning rose fair and beautiful in the clear heavens, the wind had changed to the southeast, which was disadvantageous for our mooring place; and it might have been dangerous for us to remain in that harbor, should the breeze become violent.

Leaving False Presqu'ile, we pursued our voyage under the most favorable auspices.

After a course of several hours, we reached _Cheboygan_, a town situated on the northern shore of the Michigan Peninsula, thirteen miles from the Straits of Mackinaw. Lumber trade is carried on especially in this place, which contains about 7,500 inhabitants.

Resuming our trip the next forenoon, a short course brought us to the terminus of our voyage on Lake Huron; when reaching the _Straits of Mackinaw_, whose blue green waves divide the State of Michigan.

Extending nearly nine miles in circumference, and rising at its highest

point over 300 feet above the waves, we beheld the famous _Mackinaw Island_, which has filled an important place in the history of exploration. Here was the meeting place of the daring French _voyageurs_ and _aventuriers_, before the pilgrims landed on Plymouth Rock. Many wild and thrilling incidents in the lives of Marquette, Hennepin, and La Salle occurred on this island; and over at Point St. Ignace, in plain view, Marquette was escorted to his burial place by a hundred canoes of plumed and painted Ottawa and Huron warriors in 1677.

Just across, on the most northern point of the Lower Peninsula, stood old Fort Mackinaw, the scene of the terrible massacre of the whites by the Indians under Pontiac in 1763.

On this island were fought two battles in the war of 1812. It was here that Schoolcraft wrote his celebrated History of the North American Indians, and the Legend of Hiawatha, which Longfellow, visiting him here, afterward expanded into a poem.

The island's varied scenery, and its history and traditions, have been portrayed in vivid word pictures by Marion Harland in a book, bearing the title "With the Best Intentions," by which she has recently added to her wide fame.

Having crossed the strait at its narrowest part four miles in width, we caught sight of the beautiful waters of _Lake Michigan_, the only one in the group of the North American great lakes which extends entirely within the territory of the United States, having a maximum breadth of eighty four miles, and a depth varying from 700 to 1,000 feet. Its length amounts to 345 miles from the northwestern corner of Indiana and the northern part of Illinois to the Straits of Mackinaw.

We followed the same route which more than two centuries ago was taken by Jacques Marquette who, in the spring of 1673, with Joliet for his chieftain, and five other Frenchmen, embarked at Mackinaw in two frail bark canoes.

The disposition to pause for an instant, and to reflect upon the character and circumstance of our luxurious voyage as contrasted with that of these few adventurers in their fragile birch canoes--a little over 220 years ago--is almost irresistible.

On that occasion it was a journey of extreme peril--with no friendly populous havens at which the necessary commodities could be obtained. Those densely wooded shores afforded no hospitable refuge to these hardy men, and their destination or return was a question of great uncertainty.

We pushed along with the marvelous propeller and, surrounded with every comfort, had the assurance of each evening anchoring in some safe harbor--encountering cheerful voices, and seeing glad faces--with the possibility of daily finding everything we wanted, in profusion. There was the postoffice, with its rapid service at our disposal, or the electric telegraph, by means of which we could communicate with every part of civilization, ever within our reach--and the climax of modern

genius in the magnificent structures of the Columbian Exposition awaiting us--the marvel of the nineteenth century, with its unparalleled aggregation. The thought is overwhelming! And could these explorers have seen in a dream--what we witnessed in reality--it would have seemed to them an impossibility that so short a time could have brought about such great events.

The eastern lake shore was richly garlanded with forests displaying a vast multitude of verdant hues, varying through all the shades of green. Over the whole the azure of the sky cast a deep, misty blue; blending toward the rocks of lime- and sandstone, seemingly embracing every possible tint and shade of color.

Having achieved a course of sixty miles, the yacht cast anchor in the excellent harbor of St. James on Beaver Island, a large tract of land covering an area of 3,700 acres. Vessels of various kinds and shapes lay moored in this spacious inlet. Being wind-bound, we tarried for two days, which gave us opportunity to become acquainted with the features of the island. We were informed that it is identified with the history of Mormonism; since it was first settled by adherents of that sect, who robbed the ships entering this port, and who led the lives of pirates. After their leader was killed in one of the numerous combats which ensued with the attacked sailors, they abandoned the place; but the habitation of the Mormon chief is still existing, probably the only vestige left here of the followers of Joseph Smith.

At 1 o'clock A.M., on Wednesday, August 16th, we departed from Beaver Island. The pilot had guided the "Marguerite" on a course of about forty-five miles southward, when we approached Northport, Michigan, a place noteworthy for having not a single of those maleficient institutions, commonly styled beer-saloons.

We lingered two hours at the dock of this town. The white fields of blinding mist floated along the winding valleys of the low lake shore; and from the dark clouds curtaining the sun, the rain fell continuously. Thus the landscape on our left bore a gray and dim tincture.

Before the darkness of evening had gathered about us, the yacht was made fast to the dock of Frankfort, on the Michigan coast, a small place with a population of about 1,000, romantically situated. Taking our departure from the town on the following morning, we observed that the fog, covering the surrounding landscape with a thick, impenetrable veil, increased in density until it seemed as if from moment to moment additional tints of sombre gray were united to the haze. In fact, after a while we were unable to discern the outline of the coast, having to pursue our way with great caution.

After the lapse of four anxious hours, we had the great satisfaction to hear the welcome sound of the fog-horn of Manistee, the county seat of Manistee County, in Michigan. It is situated at the mouth of the same-named river, which is navigable for vessels, drawing ten to twelve feet of water, for the distance of one and one-half miles to Manistee Lake. Largely engaged in lumber trade, the city has a score of saw-mills

and about as many shingle-mills, the latter of which produce annually 450,000,000 shingles, the largest number made at any one place in the world. In consequence of the discovery in 1881 of a bed of solid salt, thirty feet thick, extensive salt factories are being built. The population of the city has rapidly increased in later years, comprising about 14,000 residents at present. The surrounding district is especially adapted for fruit-growing; and sportsmen are attracted to the Manistee River and its tributaries by the abundance of the otherwise rarely found grayling.

Since we expected company on board the "Marguerite" in the evening--Mr. Wilkinson, a citizen of Milwaukee, who intended to make us acquainted with his wife, we went on shore immediately after dinner to view the city, so as to return in time to meet our visitors.

Manistee made the impression of a flourishing business town. The comparatively long trading thoroughfare is a broad street nicely laid out, and adorned with numerous stately buildings and spacious stores.

Not long after our departure from Manistee, which occurred early on the following morning, a sudden squall threatened us; and a few minutes later, a terrific flash and peal broke almost simultaneously upon us, followed by a violent shower. Fortunately, it lasted but a short time. The tempest gradually ceased; the irregular and blinding flashes became fewer and the thunder rolled less loudly. Gradually the scene changed to one of peaceful beauty so that the rose light of the radiant sun-ball appeared in the heavens; casting a new glory on the picturesque scenery of water and shore.

The surface of the lake had become calm; and speeding along, we enjoyed the lovely weather which was not destined to continue. For, toward midday a fresh breeze rippled the waters that by degrees were transformed into towering waves, shaking their foamy crests, and tossing us angrily from side to side; and we were not sorry when we reached the harbor of Muskegon, about six miles from Muskegon City, situated on the same-named river which here, four miles from its mouth, widens into Muskegon Lake. It is the best harbor on the east side of the great lake. The city has daily steamboat navigation with Chicago; and saws and ships enormous quantities of lumber. Its principal manufactories are a number of foundries, machine shops, and boiler works. The present population is estimated to comprise about 24,000.

While admiring the lovely scenery enhanced by an enchanting sunset, from the deck of the yacht, our attention was distracted by approaching footsteps. In the uncertain, fading daylight, we perceived a gentleman accompanied by a lady--curiously regarding us--whom we invited on board the "Marguerite."

Mrs. and Mr. Wickham were the names by which this fair couple was introduced. That they spent the evening in our company, was very acceptable to us--as we but rarely had visitors on our pilgrimage. They greatly admired our floating home, and as the moon arose to bathe us with his silvery light, they took their departure.

The young archer--morn--broke his arrows on the remote hills, walking golden-sandaled down the lake, when we continued our voyage.

The still waters were soon lashed into fury again by an unfavorable wind, increasing toward midday to such a degree that we were glad to take refuge in the harbor of _South Haven_, where we lingered until the dawn of another day.

Opposite the mooring-place of the "Marguerite" stood an edifice whose interior we all longed to view. Having so unexpectedly become acquainted with the Life-Saving Service on the occasion of our adventure near Thunder Bay, we were anxious to learn more about that noble institution. In the afternoon we set out for the South Haven Life-Saving Station whose captain, an obliging gentleman, gave us very satisfactory explanations. He first called our attention to the splendid qualities of the life-boat: such as its power to right itself if upset; the capability of immediate self-discharge when filled with water; its strength; resistance to overturning; speed against a heavy sea; buoyancy; and facility in launching and taking the shore.

We then inspected the diverse apparatuses utilized for rescuing the shipwrecked.

A very clever contrivance, especially appropriate for saving invalids, children, and aged persons is the metallic car, a small covered boat, which can hold three or four persons who, entering by a comparatively small aperture, are shut in and drawn ashore, safely protected from injury even though overturned by the surf.

For projecting a line over a stranded vessel a howitzer is used; and in this way a communication is secured to the shore. The cork life-belts worn by the men, are of the plan first designed by Admiral Ward.

It is safe to say that the United States Life-Saving Service is chief among the life-boat societies of other nations, both as regards the extent of coast embraced, and the amount of work done. The whole support of this service is provided for by annual grants from Congress. Besides its vast coast line, it guards the shores of its great lakes. Since the sea-bordering portions of America in many places are destitute of human habitations, the constant employment of surfmen is required for the express purpose of looking out for vessels in distress and manning the surf-boats. It also necessitates the erection of houses of refuge provisioned so as to afford shelter and food to shipwrecked sailors for a considerable time at places, where without such provisions those who escape the sea, would probably perish from hunger and exposure.

The shores of the United States lakes and sea comprise over 10,000 miles, embracing almost every variety of climate and formation of land. This great extent of sea-board is divided into twelve districts with in all 244 stations. Of these 182 are on the Atlantic, forty-nine on the lakes, and twelve on the Pacific. Many of the stations are closed during the fine months of the year; their crews being disbanded till the winter gales

again summon them to their heroic and dangerous work. That they render noble service in this way, may be gathered from the annual reports.

The official statement of 1893 shows that the disasters to shipping in that year amounted to 427 cases; that on board of vessels thus endangered there were 3,565 persons of whom 3,542 were saved.

After we had thus enriched our knowledge referring to this humane institution with its present effective system, we proceeded to the neighboring shore of Lake Michigan, here forming a beautiful beach. The polished and print-less sand studded with small, shining pebbles spread before us in vast expanse; and the magnificent waters of the lake glittered in the sun-beams as though they were sown with diamonds. When the surf came in, and the white fringe of the sliding wave shot up the beach, the light color of the sand was deepened to a silvery gray. As much as we marred and defaced its fine-grained, bright surface, it was ever beaten down anew by the advancing and retreating waves. We had hardly deserted this lovely spot, when our foot prints were washed away by the ever returning sea.

On Monday at an advanced hour in the evening we departed from South Haven. Since the glories of the sunset, with its witchery of rose and gold, promised a fine night, we decided to continue our voyage as far as Michigan City.

The panorama we witnessed during that nocturnal trip was as magnificent as can be imagined. The full-orbed moon on the wave was beautiful; and so was the landscape bathed in its light.

Toward 10 o'clock we arrived at our destination, a town in La Porte Co., Indiana.

Michigan City is the largest lumber-market in the State, and has numerous manufacturing establishments. As a lake-port, it is a place of considerable prosperity comprising a population of about 11,000.

It was in the early morning, Tuesday, August 22nd, that we left Michigan City. Having sailed along the coast of the lake for about three hours, we discerned in the misty distance the site of the "Queen of the West."

At twenty minutes to 9 o'clock, it became plainly cognizable. In transports of delight we glanced at a vast, verdant tract of land adorned with magnificent structures appearing to be of the purest marble; in their matchless beauty imparting to the mind some grand allegorical _tableau_, intending to convey the poet's idea of the New Jerusalem.

It was the famous _White City_, the site of the World's Columbian Exposition, that charmed our eyes and gratified our taste so much. No one can adequately describe that sight as seen from the clear waters of the lake.--I imagine that our illustrious Columbus must have been equally affected as he beheld Guanahani, that fruitful island in its wild luxuriance, on his first landing in the New World.

CHAPTER IV.

STAY IN CHICAGO AND VISIT TO THE WORLD'S FAIR.

Our arrival in Chicago put an end to our pleasurable voyage comprising the considerable length of 1,243 miles, during which

"The waves were our pillow,
Our cradle the sea:
When rough was the billow
Not timid were we."

This westward trip afforded us every hour a revelation of the surprising growth of the nation that lives under the Stars and Stripes. My traveling companions were equally delighted with this course, notwithstanding their being preacquainted with that portion of the west, whose rapid development makes it practically a new and another west every ten years. In fact, America astonishes the world; and it is no common pleasure to study and note the progress of this great republic of which Chicago is the second city in commercial importance, as well as in population.

We were anxious to obtain an adequate conception of the site of a city that is the synonym of push and prosperity, and to which Congress had awarded the World's Columbian Exposition. Therefore, the yacht was moored inside the breakwater, near the mouth of the inlet, called the Chicago River, which runs from the lake nearly one mile westward; then separates into two branches, one flowing northwest, the other southwest; thus dividing Chicago into three divisions, connected by more than thirty-five bridges, and two tunnels laid under the bed of the river. This streamlet used to empty into Lake Michigan; but a remarkable piece of engineering caused it to change its course and so to speak, run "uphill." The Illinois and Michigan Canal, with which the main branch of the river is connected, was so deepened as to draw the water out from the lake, so that--through this channel emptying into the Illinois River--the water of Lake Michigan flows into the Gulf of Mexico by means of the Mississippi River. Had it been later in the season, we might have decided to follow this watercourse in order to view the fertile Mississippi River Valley, and to enjoy the beauties of the sunny south.

The largest vessels may be towed into the Chicago River, being supplied with docks and water-slips and affording a dockage capacity of nearly forty miles.--Originally named Chacaqua River, (the Indian word for thunder, after the Indian Thor or Thunder God), it is supposed to have given the city its name.

At midday we left our anchorage--on which the eye of heaven shone almost too hot--and undertook our first trip to the Fair Grounds. Seated on deck, we inhaled the invigorating, fresh breeze sweeping over the lake and modified by the burning rays of the sun that kissed the brilliant, blue waters beneath, with his golden face, gilding them with heavenly alchemy.

High ran our anticipations as we were approaching the renowned White City, to which representatives of all nations have made a pilgrimage.

At the expiration of about one-half hour, we reached the pier, destined for the halting-place of yachts; and welcomed by the supervisor of the harbor, we went on shore.

The first impression was bewildering. Americans have reason to be proud of what was to be viewed in Jackson Park; as such buildings no previous generations of men have seen, congregated in this manner; and the display of the achievements of science, art, and industries, exhibited in them, has undoubtedly eclipsed all other expositions in the world's annals of progress.

It seems impossible to give so adequate a pen-picture of the World's Fair as to impart to the reader an accurate idea of its true grandeur. Many minds have essayed already to reproduce what they have witnessed there; many pens have attempted to record exactly the incomparable impression the exposition effected upon its visitors, but, it is safe to say, without even faintly describing it; for, can language convey to a blind man what "color" means, or to a deaf person the meaning of music?--No more can the pen of the most gifted author adequately portray the World's Columbian Exposition. If one would give to each building a volume; a shelf to the Midway Plaisance; and to the exhibitions a whole library in way of description, yet half of its beauties and wonders would not be told.--

Leaving the "Marguerite" at the North Pier, our attention was called to a unique exhibit made by the U.S. Navy Department, a structure representing a faithful model of a modern coast-line battle-ship. This full-sized imitation _man-of-war_ _"Illinois"_ was completely equipped erected on piling on the lake front, and surrounded by water, so as to give the appearance of being moored to a wharf. Here the Government showed also a war baloon, a light-house, a life-saving station complete with apparatus, and a gun battery.

Proceeding a little westward, we viewed a building, delightfully located, bearing a strong resemblance to the National Museum at Washington. This imposing edifice classic in style, and adorned by a central octagonal dome was the _United States Government Building_; to the southward of which rose the largest of the Exposition structures, the _Manufactures and Liberal Arts Building_, notable for its gigantic but symmetrical proportions, covering an area of more than thirty-one acres.

Looking in a southern direction, we caught sight of the pier extending 1,000 feet into the lake, and affording a landing-place for steamers. It was bounded on the east by the beautiful facade of the _Casino_, which presented a decidedly Venetian aspect; its nine pavilions being in communication both by gondolas and bridges. At the west end of the pier stood thirteen stately columns emblematic of the Thirteen Original States of the Union.

Rising out of the lagoon, the colossal _Statue of the Republic,_ the

largest ever built in America, predominated over this charming scene.

Beyond it extended a broad basin from which grassy terraces and broad walks led on the southward to one of the most magnificent edifices raised for the exposition, the Agricultural Building. In style of architecture it pertained to the classic renaissance and was erected at a cost of about \$1,000,000.

From the pier westward across the park, we walked through an avenue, several feet long; affording a view of almost unparalleled splendor. Encompassing a beautiful sheet of water, the majestic facades of imposing buildings attracted our eyes; above all, a superb gilded dome shimmering in the sun-light, and pertaining to the Administration Building, which was pronounced the gem and crown of the Exposition structures. In general design in the style of the French renaissance, it was built at an expense of about \$550,000.

Located at the extreme south of the park rose the stately Machinery Hall, following classical models throughout, and being especially rich in architectural lines and details. Its construction required a sum of \$1,000,000.

Facing the Grand Avenue, our eyes rested with delight upon two immense edifices on either side of the Administration Building, one for the Electrical and the other for the Mining Exhibit.

Turning to the northward, we viewed the Transportation Building, exquisitely refined and simple in architectural treatment, although very rich and costly in detail.

On our right we beheld one of the most notable spots in Jackson Park, (viz) Wooded Island, a gem of primitive nature, agreeably contrasting with the grand productions of human skill surrounding it. Close by was the Palace of Horticulture, the largest structure ever erected for such purpose, costing about \$400,000.

Proceeding more northward, we reached the entrance to the Midway Plaisance, directly east of which stood, encompassed by luxuriant shrubs and beds of fragrant flowers, like a white silhouette against the background of old and stately oaks, the daintily designed Woman's Building.

On a well paved boulevard we entered the great "Highway through the Nations." Formerly a promenade belonging to the South Park System and connecting Jackson Park on the east and Washington Park on the west, it was styled by the seekers of plaisir "Midway Plaisance" signifying "Pleasure-Way." This name has been retained by the Administration of the World's Fair, whereas the country-lane of former times had undergone a complete metamorphosis. We were unable to realize the radical character of the transformation as we contemplated the enormous variety of attractions here presented, more numerous and unlike any others ever brought together. Therefore, it is a very difficult task to give the reader an exact idea of the impression the Midway Plaisance effected upon its visitors, because we

generally derive our conception of a scene from the comparison it will bear with similar spectacles.

The "Highway through the Nations" constituted an attractive, novel, and instructive addition to the Exposition. For, besides enlightening ourselves in regard to the styles of structures--inhabited by the diverse nations on the earth,--forming a fine array of villages, castles, towers, pavilions, pagodas, mosques, and other displays of oriental and occidental architecture, we viewed the natives of the various countries. There were representatives of nearly all the races and tribes, constituting the human population on our planet which is estimated to amount to 1,500,000,000 men. We had a chance to study their features, manners, and customs; their way of dressing, as well as their language and special occupations. Such opportunities are only otherwise given to travelers around the globe.

The rays of the descending sun--casting rosy reflections on the beautiful panorama and the mammoth _Ferris Wheel_, with its gigantic form overtopping the structures of the Midway Plaisance--gave us the signal for abandoning this charming realm.

Thus, directing our steps toward the Exposition Grounds, we arrived at the northwestern portion of Jackson Park where we ascended the entrance to a station of the _Columbian Intramural Railway_, the first and only electric elevated railroad, operated by the Third Rail Trolley System.--Conveyed by the driving power of electricity, we had a delightful ride affording a fine view upon the northern part of the grounds. Scores of graceful structures constituting a veritable town of palaces, embodied the best conceptions of America's greatest architectural display.

A picturesque group of buildings erected by the States and Territories of the American Union, rose in a semicircle around the _Fine Arts Galleries_, a palace costing half a million. Grecian-ionic in style, this edifice represented a pure type of the most refined classic architecture. In the western portion of this group--facing the North Pond--stood the _Illinois Building_, adorned by a dome in the center, and a great porch looking southward.

Surrounded by lawns, walks, beds of flowers, and shrubs, the charming structures of Foreign Nations were ranged on wide, curved avenues--affording an interesting aspect.

Just south of the _Foreign_ and _State Buildings_ we observed a considerable expanse of the lagoon, with inlet to the lake, encompassing three islands. On the largest one stood--contrasting agreeably in appearance with the other edifices--the _U.S. Fisheries Building_, Spanish-Romanesque in style and flanked at each end by a curved arcade connecting it with two polygonal pavilions.

Leaving the Intramural Train at the North Loop, we arrived at the Government Building; thus having completed our round-trip on the Fair Grounds and Midway Plaisance.

When we returned to our floating home, we had the satisfaction of having

obtained the best possible results of our first visit by properly utilizing every minute.

It will be obvious to the reader that the excursion just described, was equivalent to a trip around the world; wherefore I am entitled to the assertion that it even surpassed Nellie Bly's remarkable feat who needed seventy-two days, six hours, and eleven minutes for accomplishing her circumterrestrial voyage.

This success was due to the management of Mr. James, who made his intelligence effectual, in unison with great experience, gained by having attended the grand international expositions held in the course of several decades in the different sections of the globe.

Since there did not exist accommodations for a safe anchorage for yachts along the piers of the White City, we were obliged to sail back to the Chicago Harbor. The ride on the billows of Lake Michigan, however, was very enjoyable after the heat of the day. Fanned by the cooling sea-breezes, which we inhaled in the fullness of delight, our eyes rested in perfect rapture on the glorious panorama of the grounds extending toward the lake shore. The superb structures rising vaguely and obscurely in a shadowy expanse under the gloom of the growing twilight, were later beautifully illuminated by uncountable electric lights; from the powerful arc-light of 8,000 candles to the delicate incandescent lamp of one-sixteenth candle power gleaming like tiny fire-flies in the distance. It filled us with amazement to cogitate, that human mind and manual skill could create a spot on earth looking so much like a conception of paradise.

The next morning when corroborating our nerves by a hearty breakfast, Mr. James announced to us the programme of the day which set forth that we should witness in detail the attractions of the Midway Plaisance--a proposal that pleased us very much.

Having again disembarked at the pier of the Exposition Grounds, the Intramural Railway conveyed us rapidly--running with a velocity of twelve miles an hour--to the entrance of the International Highway.

We commenced with the attractions at the right hand side--and having passed the displays of the Diamond Match Company and the Workingmen's Home--the international Dress and Costume Exhibit, known as the Congress of Beauty, attracted our attention. Between forty and fifty pretty living representatives pertaining to the fair sex of different nationalities, races, and types were dressed in distinctive national or racial costumes.

The California Nursery and Citrus Tree Exhibit separated this Beauty Show from the Electric Scenic Theater, which may be regarded as a triumph of the modern progress in the electrical science. It depicted the changes of a beautiful Swiss Alpine scenery as such are gradually occurring from dawn till night--representing the magical and most wonderfully realistic effects ever produced by electric lamps.

Visiting the Libbey Glass Works, we obtained a very clear idea of the

art of manufacturing glass--by following up the different processes of melting, blowing, cutting, spinning, weaving etc. all of which were in full operation in this exhibit.

In fact, the endeavor of this company to instruct the spectator in every detail of the work--was a complete success and exceedingly satisfactory. The ingenious construction of their magnificent building was especially adapted to enable the daily throngs--resorting to it--to have every opportunity for observation; and judging from what we saw, and the various comments we heard, we should be inclined to feel that the management had every reason to be satisfied with their splendid effort.

The artistic products manufactured solely by this company, and shown in the diverse departments--as well as those, decorating the Crystal Art Display Rooms--equal anything in the past and present, not excepting the celebrated Bohemian and Venetian manufactures of world-wide fame; and certainly the exhibition of cut glass made by the Libbey Company at this Exposition, has established the fact, that foreign manufactures can no longer claim to turn out the best artistic work; for truly, in that rich and unrivaled display, the summit of clear glass making and magical effects in cutting and polishing have been achieved.

Especially attractive were the tapestries and fabrics woven from spun glass. This was decidedly notable in the marvelous dress woven from one loom for the Spanish Princess Eulalia at a cost of \$2,500. That these goods also serve as a canvas does for artistic work--was evidently proved by the sundry beautiful effects of this kind in the Crystal Art Room.--It would be impossible to enumerate the various articles produced in this wonderful and interesting display; but it is safe to say--the working exhibit of the Libbey Glass Company--in their palatial and costly structure was one of the chief features of the Midway Plaisance and the ever memorable Columbian Exposition.

A gateway--reminding us of mediaeval times--ushered the visitor into the Irish Village and Donegal Castle, a representative exhibit of Irish industry, art, and antiquity. The scenes there--were picturesque and uniquely Hibernian. In one of the cottages Irish lace-making could be noted; in another was shown by Hibernians the whole process of dyeing, carding, spinning and weaving home-spuns as well as various other branches of industrial developments in Ireland.

A few steps sufficed to transfer us from here--a representation of the extreme western portion of Europe to the most eastern country on the Eastern Hemisphere--Japan; which fact demonstrated the verity: Les extremes se touchent. Entering the Japanese bazaar, we observed Japanese ladies and gentlemen selling articles manufactured in--and imported from Nipon.

A highly interesting study of the natives of West Java (Dutch East Indies)--their occupations--and their bamboo huts--could be had in the Javanese Village exhibiting more than a hundred little men with bright and cheerful Malay faces, and thirty-six short women whose graceful movements were a source of attraction to thousands of visitors.

This scene of the tropical regions stood in striking contrast with a feature in immediate nearness--pertaining to a temperate climate--the German Village. Here, in the spacious concert-garden shaded by the dense foliage of numerous oak-trees, two German military bands, one of the infantry and one of the cavalry--seventy-four men in all--gave grand echt deutsche Militaerconcerte. The group of typical German peasant homes, the Black Forest House, the Westphalian Inn, the Upper Bavarian Home, and the Spreewald House, together with the Hessian Rural Town-hall, and the Castle were exact reproductions of mediaeval times. A portion of this stronghold from a remote date, was given up to the ethnographic museum; a collection chiefly of implements of war and of chase, illustrative of all periods beginning with the pre-historic and ending with the renaissance. An attractive group in wax constituted the figure of Germania, surrounded by German heroes from Arminius down to William I.

The Pompeii Panorama--near by--showed a very realistic representation of this city destroyed by the eruption of the Vesuvius in 79. This display was succeeded by the Persian Theater and the Model of the Eiffel Tower.

We left the crowded roadway, and entered the narrow Street in Cairo which made an imposing impression with its strange, oriental facades--the picturesque shops--and the quaint overhanging upper stories of the ancient Egyptian city. Natives of this African country--which is fertilized by the waters of the Nile--manufactured and had for sale Egyptian, Arabian, and Soudanese articles. Donkeys and camels were engaged in carrying visitors who chose to admire the busy thoroughfare seated on the backs of these animals. The native camel-drivers in their national costumes moved around and mingled with the strangers--which gave the populated street a peculiar charm to the eye, whereas the "Bum-Bum Candy" sold by Egyptian confectioners, afforded a strange sensation to the palate of the visitor.

Here, where the architecture, the surroundings, and the people were as far removed from anything American as could well be imagined, we really--for some minutes--were lost to all consciousness of being in that extremely modern city, called Chicago.

After having viewed the side attractions to which belonged the Egyptian temple--resembling the temple of Luxor--the tombs of the ancient kings, and fac-similes of mummies, we entered the Algerian and Tunisian Village. Besides a theater, it contained a great number of booths or bazaars in which a choice selection of goods of all kinds--peculiar to Algiers--was for sale.

Proceeding southward through the frequented avenue, we saw--in succession--the Kilauea Panorama, a vivid picture of the great volcano of Hawaii, with all the surrounding scenery--an American Indian Village, showing the remnants of some of the greatest North American Indian tribes, and their manner of living--and a Chinese Village including a theater, a joss house, and a bazaar.

The most southwestern portion of the Midway Plaisance was occupied by the

"Wild East Show" where performances were given by Bedouin Arabs. With their short Turkish swords--the cimeters--they accomplished feats of such intrepidity and daring as to cause the spectators' blood to coagulate in their veins.

Bending our steps westward again, our attention was fixed upon the attractions on the north; _id est_ on our right hand side.

Very striking to our eyes were two exhibits the comparison of which established the fact that they were as unlike each other as could be fancied. Not only that the two villages contrasted greatly by their external appearance; but the scenes and inhabitants that they encompassed, were in direct opposition. Reader, can you realize that here from the North Pole to the Equator there was but one step? _Laplanders_, from the Arctic region in Europe, the next-door neighbors of barbarians from the Torrid Zone in Africa? Although both low in the scale of humanity, the fierce and savage _Natives of Dahomey_ with their repulsive habits exhibited the characteristics of the very undermost order of mankind.

But the mind was at once relieved from this sad picture of human debasement by the refined and attractive scenes in the _Austrian Village_, inclosing realistic reproductions of thirty-six buildings as they existed, more than a century ago, in old Vienna, deservedly eulogized in the song:

Es gibt nur a Kaiserstadt
Es gibt nur a Wien;
Da muss es praechtig sein,
Da moecht' ich hin!

Having arrived at the center of the spacious promenade, we ascended one of the six northern platforms, communicating by turns with thirty-six aerial coaches, suspended by an iron axle to the periphery of the mammoth _Ferris Wheel_. A conductor invited us to step into a coach, as the appropriate moment had arrived, whereupon we entered a car having the seating capacity of forty persons, and almost the size of an ordinary Pullman Palace Car. Ere we were conscious of any movement, the monster wheel was slowly revolving in response to the powerful machinery by which it was operated--a trophy of the modern era of eminent progress. The total weight of the moving mass was 1,200 tons; and its construction involved the expenditure of \$400,000. Reader, if you have not experienced the charm of this circular ride through a circumference of about 785 feet, you hardly can convey to your mind the conception of the fascination it afforded. Since the motion of the coaches was almost imperceptible, we could enjoy the trip--(viz)--two complete revolutions of the wheel--without the least excitement naturally aroused by rapid movement. Imagine the sensation of being carried up 250 feet on one side--and of being slowly lowered on the other; fancy the enjoyment and delight when gradually gaining a complete view of the Fair Grounds and the Midway Plaisance--a bird's eye-view of the whole of Chicago--and also a good portion of Lake Michigan. Dear reader, you will certainly acknowledge the fact that such a ride surpassed any similar brief journey ever taken. For, what other device for transportation can maintain the claim of enabling its passengers to look upon the whole world during twenty-five minutes!--

"When you get used to the motion
Only delight you will feel:
Gone is each terrified notion
Once in the circle of steel.
And you enjoy the commotion
Clap and applaud with much zeal:
For it surpasses old ocean
To ride in the great 'Ferris Wheel.'"

The sun--being almost too liberal in the expenditure of heat--made us long for a refreshing breeze. Therefore we decided to ride in the _Ice-Railway._ Here we had opportunity to feel the excitement caused by velocity of motion. For a seventy mile-an-hour locomotive would have been monotonous and tiresome in comparison with a dash around the ice-railway track, containing 850 feet, and covering an elliptic space whose surface had a coat of ice nearly an inch thick. Over this smooth and glistening substance the bobsleigh was gliding with the speed of a toboggan and the ease of a coaster to the merry jingle of sleigh bells.

This exhibit--whose cost amounted to \$100,000--gave an example of inventive genius, and also of the successful application--in a novel manner--of the principles of refrigeration.

The beautiful building next to the Ice Railway envired an excellent imitation _en miniature_ of the magnificent _Cathedral of St. Peter_ in Rome, its size being one-sixteenth of the original. When viewing this model, the elaborate papal throne, and the Vatican Guards in the exact uniform of the pope's attendants, one might imagine to have been conveyed into _la bella Italia_ by the agency of a magic wand.

Promenading more eastward, we found ourselves _vis-a-vis_ the _Moorish Palace_, a fine reproduction of Saracenic architecture, the famous Alhambra in Granada, Spain.

The attractions exhibited in the interior of this structure could, indeed, bear a comparison with those offered in a realm of enchantment. The optical illusions, produced by ingeniously arranged mirrors, were a pleasing surprise to the visitor. Luxuriant palms decorating the labyrinthian garden appeared to be endless in number--casting their shade over hundreds of life-like figures in gaudy costumes. Each of these groups in wax, was multiplied again and again in the perspective of mirrors. Entering the palace, the visitor was unable to shake off the feeling of perplexity caused by the extraordinary spectacles to be witnessed within its walls. The most startling surprises were the bottomless well, the cave, the monster kaleidoscope, and the panopticon. A touching scene, produced in wax, represented the execution of the unfortunate Queen Marie Antoinette. So realistic was its effect that many tender-hearted mortals could not refrain from shedding tears of sympathy for the ill-fated consort of Louis XVI of France.

A personage of special interest in the _Turkish Village_ was "Far-a-way Moses"--the celebrated guide and counselor of Americans, visiting the

shores of the Bosphorus--who has been immortalized by Mark Twain. With a pleasant smile his popular face, he gave a cordial greeting to every visitor.

The various scenes constituted a true reproduction of Ottoman life. The decorations in the Turkish theater were in purely oriental style; and the representations on the stage showed the manners and customs of the countries embracing the Turkish Empire. The Bedouin Camp, north of the grand bazaar, displayed the peculiarities of a nomadic life of those Arabian tribes.

Adjacent to a Turkish cafe, the Panorama of the Bernese Alps was on exhibition. A beautiful painting showed the grand scenery of Grindelwald, the Wetterhorn, the Jungfrau, Schreckhorn, Jura, the village of Lauterbrunnen, and the little town of Thun.

Ushered by a gate into the Johore Village, we viewed the habitations, weapons, apparels, and curiosities of that Malay tribe. The performance given by one of the natives stood in striking contrast with what we understand by the art of dancing. In fact, it was more a series of graceful poses with slow rythmic movements of hands and feet. This peculiar dance effected a strange impression upon us; but seemed to amuse our Baby Virginia beyond measure, who, on the arms of her faithful nurse, attempted to produce movements similar to those she had just witnessed.

The South Sea Islanders' Village exhibited Malays from Sumatra, Borneo, Samoa, Fiji, New Zealand, and other islands belonging to Oceanica. The huts and their occupants had a strong resemblance with those of the Javanese village whose inhabitants, however, were more agreeable-looking people.

Paying a visit to Hagenbeck's Zoological Arena, we first admired his famous menagerie, which comprised rare varieties of quadrapeds, and a fine collection of birds.

In a circus modeled on the plan of the Coliseum of Rome, we witnessed performances that evinced the wonderful docility Mr. Hagenbeck's animals possess, and manifested the complete control their trainers have over them.

We had already seen innumerable circus feats; but those performed on this occasion, surpassed them all. For, such a perfection in training ferocious animals is extremely rare. Vraiment, the five Nubian giant lions afforded an imposing aspect; and their performances were simply marvelous, indicating that--while human ingenuity and skill subdued the great forces of nature to the use of mankind--also the fierce, majestic king of beasts is made submissive to man's will by his master power over all.

Industrial, Mining, Diving, and Horticultural Exhibits occupied the remaining space of this eastern portion, whose extremity was taken up by Lady Aberdeen's Irish Village. Here the displays were similar to those inclosed in Mrs. Hart's Irish Village, already described; but the novel feature of Blarney Castle was the renowned Magic Stone, supposed to

possess extraordinary virtues.

Thus, the unique Highway through the Nations afforded a prolific source for sight-seeing, and furthermore, was a sore trial to our organs of hearing. Musical and unmusical instruments of every description were in operation--from the Javanese salendon and pelog to the tuneful instruments, masterly handled by the excellent German bands.

This visit to the Midway Plaisance established the fact, that the theories--admitted by the study of geography--could not be brought into consideration. How should space and time be in existence when a few steps sufficed to convey us from the land of perpetual snow to the zone of exotic plants and tropical fruit!

"Who can all the tribes and nations name
That to Plaisance from every climate came?"

The Chinese and Turk, German and Cingalese, Esquimaux and Javanese, Irishman and Polynesian, Bedouin and Laplander, Austrian and Soudanese, Syrian, Nubian, and Japanese--all had a temporary home within the limits of a tract of land covering eighty acres.

The sinking sun which crimsoned the structures of the Midway Plaisance, exhorted us to abandon this place of international _rendez-vous_--and to return on board the "Marguerite;" since she was to convey us back to the Chicago Harbor.

Gliding along on the crystalline lake,

"We breathed the airs, not ruffling its face.
Until we came to a quiet place."

The latter we chose for our nightly abode; again casting anchor in the so-called Basin near the Chicago Breakwater.

The approaching night fully deserved its title--the season of silence and repose. The atmosphere was unusually mild. In the eastern portion of the sky the light of _Luna_ grew brighter and brighter. Her large, white circle silvered the tranquil waters and the environing scenes. In front of us at the airy distance, we viewed the beautiful White City rising from out the wave as from the stroke of the enchanter's wand; being brilliantly illumined. Around us lights of many colors flashed from vessels of every description that lay moored in our vicinity. The scenic beauty of the surroundings, the balmy air, the charming quietude on the lake--all this fascinated us in such a manner as to make us reluctant to seek the repose, to which we were entitled by the long day's extraordinary experiences.

On arriving at the Exposition Grounds the following morning, we observed that--in spite of the early hour--the promenades were unusually frequented. This fact was due to the celebration of the Illinois Day which had attracted a multitude of citizens from Chicago and environs. In accordance with our unanimous desire--to first view the interior of the largest edifice, we entered one of its four great entrances designed in

the manner of triumphal arches. The MANUFACTURES BUILDING was erected for the purpose of accommodating all classes of leading industries--the products of modern machinery and man's skillful handiwork--which, in this epoch of constant progress, have attained a high stage of perfection. And comparing the achievements of the present age with those recorded in the annals of history, proves that opinion.

Having stepped into the central aisle at the northern end of the mammoth structure, we found ourselves in a broad street, called Columbia Avenue. Glancing around, we were dazzled by the resplendent glory of an aspect almost overpowering. The fine display included those exhibits which exemplified most advantageously the modern industrial progress made by the various nations on the globe. Artistic pavilions, oriental pagodas, and quaint kiosks had been provided for most of the exhibits. The United States section--covering the entire range of manufactures, and extending from the extreme northwestern corner to the avenue east and west--evinced the high rank of the Union in the industrial world in consequence of its uncommon wealth, and the inventive genius of Americans in the production of labor-saving devices and improved machinery.

All the great firms were represented, commending the abnormal variety of domestic industries. It was, indeed, a matter of difficulty to decide which of them was paramount. Tiffany's costly exhibits in jewels, especially diamonds, housed in a beautiful pavilion, attracted the visitor's eyes.

Opposite this structure, Germany had a stately building. Gobelin tapestries and handsome furniture adorned its interior. The elegant rooms were modeled after the reception _salon_ of the Imperial Palace in Berlin, and that of King Louis of Bavaria. All the various products of industrial pursuits--inclosed in this pavilion--manifested the intelligence and dexterity of the German nation.

Austria had a rich display, principally in jewelry and ornamental decorations, in an adjoining edifice. A splendid collection, including everything in the line of manufactures, was shown in the English Pavilion, which rose south of the German exhibits. Facing the former, France occupied a structure whose walls were adorned with costly tapestries, and whose ceramic, furniture, and household decorations were worthy of the highest admiration. Next to the Belgian section a sumptuous pavilion housed an enormous outlay of diverse Russian manufactures.

At the southern end of Columbia Avenue a magnificent building formed the gateway to a rich collection of Italian art ware and industries. The handsome Spanish Pavilion was succeeded by typically Persian exhibits consisting prominently of carpets, curtains, silk needlework, and tapestries. Mexico, the land of _manana_ and _poco tiempo_ was represented by costly decorations and art feather-work. The facade of the Siamese structure--close by--covered with gold leaf, was imposing and attractive. Displays of manufactured goods had been made by scores of other countries, all of which to enumerate would be an impossibility.

As we reached the northwestern portion of the gigantic building, we were

delighted with the sight of the Japanese Pavilion, one of the most valuable structures. Upon its construction the Japanese government had expended a great amount of money. The superb exhibits in works of art, bric-a-brac, and other exquisite manufactures brought to view by this nation, evinced an eminent talent and great ingenuity.

The Mikado--to whom is due the rapid progress civilization has made in his country within the last ten years--was the first of the foreign monarchs to demonstrate an active interest in the exposition.

The melodious chimes resounding from the belfry of a clock-tower in the center of Columbia Avenue, caused us to take notice of the rapidly elapsing time. To our surprise, the immense time-piece indicated an advanced hour in the afternoon.

We could not abandon the superb temple, so amply filled with the products of human industry, embracing that which was regally magnificent, as well as that most applicable to our daily needs--without an enthusiastic thrill. If man is weak in many things, he is also grand in much; and every thoughtful observer must have paused upon this threshold to pay a tribute to that untiring energy which must make the world better for its existence and progress.

We entered the next great structure to the northwest. Here, the GOVERNMENT of the UNITED STATES from its Executive Departments, the Smithsonian Institution, the U.S. Fish Commission, and the National Museum, exhibited such articles and materials as illustrate the function and administrative faculty of the government in time of piece, as well as its resources as a war power.

Taking the south-entrance, our attention was first turned to the collection of the Smithsonian exhibits. They showed the results of scientific investigations during the forty-seven years of its existence, and the scope of its work.

The contributions from the National Museum represented the natural resources of the United States: Rare specimens of the American fauna; illustrations showing the geological variations within the limits of the United States and the utilization of nature's rich gifts bestowed upon this country. This department gave us occasion to obtain an entire idea of the enormous melioration, arts and industries have experienced in modern times--by means of exhibits demonstrating the history and development of ceramics, graphic arts, musical instruments; as well as many important trades from the most primitive stages to the present day. Here also were interesting studies in ethnology, prehistoric anthropology, archeology, religious ceremonials, zoology, mineralogy, and geology.

The Treasury Department--more westward--contained models, pictures, charts, and diagrams elucidating the Marine Hospital Service, Coast and Geodetic Survey, the Mint of the United States, the Bureau of Engraving and Printing, the U.S. Lighthouse Establishment, the Bureau of Internal Revenue, the Register's Office, and the Bureau of Statistics.

In the adjoining division assigned to the Postoffice, we could trace the subject of transportation which plays so prominent a part in the history of civilization--by means of models, drawings, and pictures from the most incipient stages to the modern uses of steam and electricity.

The northwestern portion of this interesting building was given up to the Department of the Interior; embracing the Patent Office, the Bureau of Education, the Census Office, and the U.S. Geological Survey.

In the rotunda we viewed the "_Big Tree_," a section thirty feet in length, cut from Sequoia Gigantea, a tree 300 feet high whose diameter at the base covered a space of twenty-six feet. It grew in the Sequoia National Park in the charming clime of California. Under the central dome were also shown 138 colonial exhibits--relics of historic value from days long gone by.

The War Department was well represented in all its branches; regarding uniforms and equipage, means of transportation, military engineering, shooting apparatuses, ammunition, etc.

Having visited the State and Justice Departments, we repaired to the division in which the government displayed (in the Department of Agriculture) a very complete and comprehensively arranged collection of grains obtained in this and other countries.

Very interesting were the adjacent exhibits, presenting to view the topics of food adulteration, entomology, pomology, botany, ornithology, and mammalogy; together with experiments in fibre investigation.

Betaking ourselves to the northern division, we were instructed--by various illustrations--of the methods employed by the scientific branch of the Fish Commission in determining the habits, peculiar to denizens of water. Models and apparatuses showed the results of Fish Culture.

The displays in this unique building covering almost all the branches of modern science and arts, bore testimony to the fact that the United States now rank with the most powerful nations on the globe; and to this attainment only a little more than one century of development was requisite. This says everything for American enterprise and genius--and a country so young in a very old world.

The circumstance of its being a calm evening--with the prospect of a pyrotechnic display later--permitted us to remain on the Fair Grounds longer than we usually did; hence we determined to visit still another structure.

By crossing a bridge over the lagoon, we arrived at the "_Fisheries Building_". In the main edifice we first saw fishing-tackles, nets, and other apparatuses used by fishermen, and shown by the American Net and Twine Co. The contiguous space to the right was given up to the exhibits of several States in the Union, especially noted for fisheries, and of various foreign countries as Japan, the Netherlands, Canada, France, Great Britain, Russia, and Norway. Walking through a curved arcade, we beheld on

either side aquaria of an enormous capacity, inclosing both denizens of fresh and salt water. It is safe to say the display of aquatic life made here, could rival the greatest permanent aquaria in existence; not only as to their voluminousness, but the immense variety of their specimens. Especially striking to the eye was a magnificent group of gold fishes. The huge bull-cat fish and the gigantic turtle were conspicuous by their monstrousness. We removed to the eastern extremity of the Fisheries Building, forming a spacious circular pavilion. In the rotunda a basin, twenty-six feet wide, presented a beautiful scenic effect. Over rocks picturesquely arranged, the silver meshes of a brook wound their way, forming here and there white gushes of waterfall which contrasted agreeably with the moss covered stones, and the semi-aquatic plants. The latter adorned the pool below, in which golden-hued fishes moved lightly to and fro. The inspection of the angling pavilion at the extreme western side of the Fisheries Building completed our visit in this fine structure, whose exhibits demonstrated largely the fishery wealth of the United States.

Taking advantage of the extraordinary calmness of the atmosphere, our mindful commodore resolved to moor the yacht in vicinity of the Exposition Grounds. For, he wished to give us opportunity to witness the display of pyrotechnics announced for the latter part of the evening, in solemnization of the Illinois Day. Therefore, the "Marguerite" conveyed us to a place which proved exceedingly favorable for our design. Here, our floating home was anchored. Enjoying a full vista of the White City, we found a prolific source of admiration in the grand electric spectacles. The illumination of the _Columbia fountain_ in front of the Administration Building, and the display of two electric fountains in the western extremity of the South Pond, were magical in effectiveness. Wonderful flash-lights blazed from the tops of the tallest towers, surmounting the larger structures. Whenever the operator threw the search-light investigably over the yacht, we shut our eyes spontaneously at its dazzling brilliancy.

As the gathering shadows of night wrapped land and water in darkness, the hour arrived in which the visitors on the Fair Grounds--who seemed to be almost as numerous as the sands on the shore--expected to view the scenic effects produced by means of fire.

We sat on the deck of the yacht as comfortably as in our _boudoirs_ at home. Nevertheless, we were able to enjoy _ad libitum_ the same sight that so many others in the White City could only see with difficulty, on account of the unusual throngs. When we reflected on this circumstance--so much in our favor--our hearts were filled with gratitude toward our commodore, who had selected this excellent locality. From here we admired the exceedingly fine pyrotechnic displays. Girandoles pierced the sky in all directions, with rushing lines of fire. Sky-rockets exhibiting rich hues of purple, red, and green ascended through the air; and when reaching the highest point of their blazing paths, they discharged beautiful garnitures of floating stars, sparks, crackers, serpents, gold and silver rain. Tourbillions mounting and rotating through the atmosphere, formed brilliant spiral curves of fire. Splendid effects of changing color were brought to view by revolving fire-wheels. An appropriate _finale_

constituted the burning of the American flag, which bore a sublime character in the brightness of fire.

"Flag of the free heart's hope and home,
By angel hands to valor given:
Thy stars have lit the welkin dome,
And all thy hues were born in heaven"

As the first faint smile of the morning peeped over the eastern wave, I rose--greatly refreshed by a sound sleep. Coming on deck, I found that the sun's unclouded orb already poured its rays of light upon the earth.

Our eyes rested with delight on the White City throned on its numerous isles, looking like a sea Cybele--ascending from the lake with her tiara of proud towers.

At our arrival on the Fair Grounds, Mr. James thoughtfully provided us with guides and rolling-chairs--vehicles which reminded us of the Japanese Jin-riki-sha.

The main entrance of the AGRICULTURAL BUILDING--adorned on either side by mammoth Corinthian pillars--ushered us into a vestibule, richly ornamented with appropriate statuary. From here, we reached a rotunda surmounted by a gigantic glass dome. When looking about on the main floor, we fancied ourselves to be in a city of pavilions. For, the States of the Union as well as the foreign nations had environed their displays with magnificent little temples and pagodas. To a great extent, they formed exhibits themselves, because in most cases the chief products of the respective country had been utilized for their construction. Nebraska, for example, had employed sweet corn for the erection of its pavilion.

Every state and territory was represented by its productions; the Northern States with Indian corn, wheat, oats, barley, rye, and other cereals; the South with cotton, rice, sugar, etc. Virginia, North Carolina, Kentucky, and Tennessee evinced their noted superiority in the culture of the nicotian plant, which is in such great favor with the consumers of tobacco.

Agricultural and other food displays were shown in great varieties by the foreign countries. In the German section the gigantic Chocolate Tower (built of several hundred tons of chocolate by the famous firm "Gebrueder Stollwerck" in Cologne) compelled admiration. The Liebig exhibit of canned and preserved meat was a prominent feature of this division. Great Britain showed specimens of grain from the English experimental grounds, representing the effects of artificial fertilization on the various seeds. The contributions made by Canada embraced grain, seeds, and roots; and its eleven ton cheese constituted one of the unique exhibits in this edifice. As in all great departmental structures, Japan was well represented. It had a fine display of its chief exports--tea, rice, and raw silk. Russia's showing covered a space of 32,000 feet. New South Wales, France, Mexico, Austria, Denmark, Sweden, and numerous other foreign countries demonstrated, likewise, the variety and wealth of their natural resources.

Besides the farm products of the world in all their diversity and perfection, agricultural machinery was exhibited: Devices of every description from the most primitive implements to the highly improved machines as they are in use at the present day. The ingenious arrangement of this display enabled the visitor to perceive at a glance the enormous progress made in that branch of industry. Thus, we viewed in the annex of the main floor one of the most perfected plows--the "Queen"--a trophy of modern inventiveness. And beside it stood an implement, which reminded us by its simplicity and unwieldiness of an apparatus, described in mythology as used by *Ceres dea agriculturæ*--when teaching to mankind this important occupation.

The south-western portion of the first floor was covered with instructive contributions of American agricultural colleges and experiment stations. They embraced the entire field of scientific research in all branches of husbandry; illustrating the most improved methods of cultivation, and explaining how the best results may be secured.

The great galleries contained a fine wool exhibit, an interesting apiary display, dairy implements, and a vast collection of manufactured food products.

The multitudinous objects brought to view in this building, proved beyond doubt, that the standard of excellence in that ancient occupation has been achieved mainly with the assistance of scientific researches.

A colonnade formed the connecting link between the Palace of Agriculture and the Machinery Hall. In its center, from an archway--leading to the *live-stock exhibit*--we enjoyed a fine view down the lagoon--extending nearly a mile in length.

As adjuncts to the agricultural department, may be regarded the displays in the *Dairy* and *Forestry Buildings*.

On entering the PALACE OF MECHANICAL ARTS, three elevated traveling cranes running from end to end of the structure, attracted our attention. They had been utilized in the work of construction, as well as in moving the machines presented to view. The platforms erected upon them, gave us occasion to look upon the entire machinery exhibition. The driving power used in the main building and annex was steam; excepting two small sections driven by electric motors. Adjoining the south side of the edifice extended the enormous power plant. It supplied the Machinery Hall with a total steam power of about 3,000 horses generated by twelve engines. The entire plant, comprising over sixty steam-engines, and operating 127 dynamos, represented a most stupendous display of mechanical energy hitherto unequalled. Its total capacity was equivalent to 20,000 H.P.

The domestic exhibits located in the western portion of the main building--but mostly in the annex, revealed the marvelous progress made during the last decades in this wonderfully prospering country. Shown by great firms from almost every state and territory were devices of various forms: Motors and apparatuses for the generation and transmission of

power--fire-engines and other appliances for extinguishing a conflagration--machine tools and devices for working metals--machinery for the manufacture of textile fabrics and clothing, for cutting wood, for typesetting, printing, embossing, book making and paper working, lithography, and photo-mechanical process, for working-stone, clay, and other minerals. In short, there were machines of every description employed in all industrial pursuits imaginable; yea, even appliances for facilitating the housekeepers' daily duties as laundry- and dish-washing machines.

In fact, it must require a considerable effort to excogitate novel labor-saving devices. Nevertheless, man's ever active ingenuity constantly increases the number of meliorated contrivances.

The pump exhibit was grouped around a tank of water, comprising an area of 7,500 feet. Here at the junction of the main hall and annex, scores of modern pumps were in active operation.

Of the foreign countries we found Germany best represented, quantitatively as well as qualitatively. The other prominent displays were made by France, Great Britain, Canada, Belgium, Russia, Spain, Italy, Mexico, New South Wales, Austria, and Switzerland.

Here, the mechanical engineer was enabled to make studies of incalculable profit for his professional career; and even the lay mind received a vast amount of information.

We abandoned the Machinery Hall at its northern extremity, and repaired to the most magnificent structure on the Exposition Grounds. The exterior of the ADMINISTRATION BUILDING, so rich in architectural treatment, had compelled our admiration, to be sure; but the interior features even exceeded it in splendor. The four mammoth entrances were beautifully adorned by statuaries of emblematic character. There exist but few edifices of similar character, whose ornamentations rival those of its interior dome, which rose 200 feet from the floor.

The four corner pavilions, four stories high, contained offices for the various departments of the Administration; Board and Committee rooms; the Postoffice; a Bank, etc.

An exhibit, manifesting the unrivaled wealth of the republic, and placed in the center of the rotunda on the first floor was an excellent reproduction of the Capitol in Washington in miniature, erected of silver coins: indeed a master-piece. I shall leave it to the reader to find out how many of the half dollar-pieces were needed for the construction of this unique building, contributed by the U.S. Government. To our regret Mr. George R. Davis, Director-General of the Columbian exposition, whom we intended to call upon, was absent. So we determined to have the ELECTRICITY BUILDING next in our programme.

The sundry appliances of electricity dispersed in all parts of the grounds, gave us already a conception of the incomparable rapidity with which it has developed--both as an industry and science. The intramural

railway demonstrated the latest application of electric motor power to elevated railroads.

The illumination of the grounds and buildings showed the marvelous progress achieved in electric lighting, and the expertness in obtaining brilliant spectacular effects. The electric launches on the lagoons manifested the usage of electricity for water-transportation.

All these practical exhibits represented purely commercial features, whereas the displays in the building--we just had entered--offered a field of revelations as regards the extraordinary accomplishments in the electrical science. They embraced all the improvements from the earlier inventions to the latest marvels.

In the southern portion of the main floor, the United States showed various devices for creating the three economic commodities--light, heat, and power.

With great interest we inspected the numerous apparatuses illustrating the phenomena and laws of electricity--the instruments for electrical measurements--the electric batteries--and the machines for producing electrical currents by mechanical power. How transmission and regulation of these currents are effected, could be studied by a vast number of devices.

A very interesting group constituted the electric motors and their manifold applications as to street and other railways; to mining, to elevators, pumps, printing presses, and domestic appliances.

The creation of light by electricity was beautifully elucidated by the weird illumination of the Edison Light Tower in the center of the building, and the Egyptian Temple in its south-eastern portion. Countless incandescent lamps were glowing in all the colors of the rainbow. The luminary effect gave us the impression as if a fiery serpent was meandering along these iridescent glass-tubes with inimitable velocity.

Among the inventions of later date may be reckoned the use of electricity in heating; especially for industrial operations as electric forging, welding, brazing, tempering, etc.

The lay mind is almost incapable of estimating the utilitarian capacity of this great property. Even many branches of modern sciences have received eminent advancement by its utilization; such as surgery, dentistry, therapeutics, metallurgy, chemistry, etc.

Germany and France made the most commendable foreign display. Great Britain, Brazil, Austria, Italy, Japan, and Canada had contributed in accordance with the development of this novel industry within their territory.

The gallery was devoted to the wire exhibit and lighter scientific apparatuses. Here were placed all the recent improvements applied to telephony and telegraphy.

Professor Elisha Gray's sensational invention--the telautograph--in active operation, attracted many spectators. It is a very ingenious contrivance, of which I have given a detailed description in my pamphlet on electricity--recently published in Cincinnati, O., by the Burgheim Publishing Co.

The great number of exhibits demonstrated the achievements in the economic usage of electricity during an amazingly short period. In fact, the electrician has obtained unequaled results in his profession. To him is due--to a great extent--the high stage of perfection in sciences, arts, and industries at the present day.

Nevertheless, the field of electrical scientific researches is by no means exhausted. However, an entirely new era will have dawned, when the ever-increasing knowledge reveals to an ingenious inventor a method to apply the electric current to every-day-usage as easily and inexpensively as we utilize water at present.

Then the epoch has appeared which may be properly styled the "_Happy_" or "_Golden Age_." For, many cares and sorrows will be removed at once.

The conscientious housekeeper, for instance, whose domestic duties often exhaust her bodily strength, will find her burdens greatly lightened. She has no more to suffer from the intolerable heat of her cooking-stove, while furnishing repasts on oppressive summer days. The electric current will cause the water to boil--the meat to broil--and the potatoes to fry. Yea, her dinner will be cooked ere she is conscious of that fact.

In like manner the electric flat-iron will smoothen her linen without fatiguing her. But not only the lady of the house will rejoice; also the poor, hen-pecked husband will be in transports of delight, as it will make his path easier in many ways. The constant complaints he was hitherto obliged to endure, will grow mute for ever, and the curtain lecture will be no more.

Furthermore, should circumstances compel the active business man to part with his wife for a long time, the marvelous inventions enable their mutual intercourse during the separation as if time and space were unknown factors. The lady need not suffer long from inquietude concerning her husband's safe arrival; for the receiving instrument of her telautograph reproduces instantaneously his own handwriting. A parcel, sent to her by express, contains a cylinder to the improved phonograph. When bringing it in proper contact with this wonderful instrument, she hears her consort's voice, just as if he was by her side, and a thousand leagues were but a few inches. Moreover, Edison's kymetograph portrays the beloved features of her absent spouse. She is now perfectly consoled; for the radiant expression of his countenance manifests health and happiness.

Having left the imposing Electricity Building, we repaired to a structure in close proximity dedicated to exhibits of the mineral kingdom. Never before, the records of international expositions gave account of a similar fact; namely, that the display made of MINES AND MINING was so capacious

as to require the erection of a special edifice. Its size and architectural beauties rivaled those of the great structures in Jackson Park. The magnificent arched entrance of the north front was richly embellished with sculptural decorations emblematic of mining and its allied industries. This spacious gateway led us to the main floor, which presented a spectacle so weird that its impression cannot be easily effaced. In temples and pavilions of ineffable gorgeousness were exhibits of gems and precious metals of dazzling beauty. Useful ores and their products, building stones, soils, salt, petroleum--indeed, everything that man furthers from the dark entrails of the earth, was offered to inspection.

Besides the mineral resources of the world in their original state, the displays embraced many devices of mining machinery; such as pumps and engines used in mining, moving, and delivering ores; apparatuses for breaking out ore and coal; for crushing and pulverizing; for reducing metals, for instance the extraction of gold and silver by milling, lixiviation, and fire; furthermore, boring and drilling tools; grinding and polishing substances, etc.

The galleries containing especially the metallurgical collection, had the appearance of the scientific department of a museum combined with the laboratory and library of a university.

Moreover, there were offered to view many interesting and instructive working models, various unique exhibits, and thousands of geological specimens.

Germany, France, and New South Wales were the leading foreign countries in this building. Great Britain and her numerous colonies occupied the largest collective space. The brilliant outlay of the Cape Colony included 40,000 rough diamonds, and illustrated the method of polishing them. Canada's mineral showing was so ponderous as to exceed the weight of 125 tons. It comprised every known species of mineral, marble, and granite in that country. In this enormous collection we discovered a block of pure nickel weighing 4,600 pounds as well as very large nuggets of native gold and silver. Mexico made its most extensive contributions to this departmental structure. Brazil, the Argentine Republic, Russia, Spain, Greece, Italy, Japan, Belgium, Austria, Ecuador, and other foreign nations were likewise well represented.

The most prominent exhibits were grouped in the eastern section of the ground floor. They proved the unexcelled mineral wealth of the United States, particularly in iron, the annual production exceeding 10,000,000 tons.

Pennsylvania took the leading place being pre-eminent in her iron and steel industries. Her supremacy in the production of "black diamonds" was manifested by a rich display; one trophy from her immense coal-mines was a shaft of coal sixty-two feet high, and ten feet square. Colorado's fine exhibit of precious metals had, as an appropriate frame, a beautiful pavilion erected entirely from her local products. The abundance of gold in this important mining state is evinced by the fact that twenty-one of

her thirty-three counties are producing that most desirable and malleable of all metals.

California--nicknamed the "Golden State"--showed among her vast resources gold, silver, platinum, quicksilver, copper, lead, zinc, iron, tin, graphite, crystal, alabaster, corundum, chrysolites, tourmalines, garnets, diamonds, and other gems. Montana had most largely contributed to this departmental structure, and inclosed her display of precious metals in a temple adorned by the famous statue of Justice. Cast from pure silver valuing \$315,000, and modeled after the celebrated actress--Mademoiselle Rehan--it was set upon a pedestal of gold, forming altogether a work of art of rare magnificence.

Michigan illustrated attractively her great copper industry; the deposits of this metal among the primary rocks of her northern section being the richest in the world.

Of special interest were the mining products of New Jersey. This state furnished minerals not found anywhere else; for instance the franklinite--a compound of iron, zinc, and manganese--named from Dr. Franklin.

Missouri, the first state in the Union to place exhibits in the Mines Building, envired the same with a beautiful pavilion built from local products.

The curiosities included in the various State and Territorial displays, were too numerous to give an account of them all.

Special features were--a miniature coal-mine shown by Iowa; a section of the world-renowned Mammoth Cave in Kentucky; a statue of rock salt representing Lot's wife, a contribution from Louisiana; a tunnel containing a double tramway for the carrying of ore displayed by Pennsylvania; a model of the largest lead-reducing works in the world from Missouri; and a miner's cabin built of mineral specimens from the different counties in the territory of New Mexico.

All the mining exhibits--in their selectness and profusion--gave evidence of the inexhaustible wealth yet stored up for man's future uses notwithstanding the geological fact, that the earth's crust has no great profundity compared with its diameter.

The "_Golden Door_" an immense archway enriched to an extraordinary degree with carvings, paintings, and overlaid with gold leaf, ushered us into the TRANSPORTATION BUILDING. It was dedicated to present the origin, growth, and development of the various methods of abridging distance used in all parts of the inhabited globe--from remote antiquity up to the present day.

We were charmed with a striking vista of richly ornamented colonnades which added considerably to the impressive effect of the exhibits. The latter comprised three general divisions: the railway--marine--and ordinary road vehicle transportation.

To the first mentioned--as most important--a space of over eight acres had been devoted. About one-eighth of this area was covered with the "Railways of the World," an exhibit of the Baltimore and Ohio Railway Co., showing the development of locomotives and cars from the earliest days to the modern time. One of the unique features in the American Railroad Section was the operation of air brakes on a train of a hundred cars, the longest ever witnessed in a single series.

In the center aisle of the annex, we inspected the chief display of the Pullman Company, a complete train sumptuously equipped. It embraced specially built Pullman Cars of the most luxurious character. The representation of the New York & Chicago Limited Express was, without doubt, the finest railway train ever constructed.

We received a very adequate idea of the wonderful achievements--evincing the genius of the age in which we live--in railway conveyance, by the out-of-door exhibit of the N.Y. Central & Hudson R.R. Co., at the southern extremity of the annex. Here, the contrast between past and present was most sharply drawn: The first train, ever used for traffic in this country, and running between Schenectady and Albany, N.Y.--the opening of this road was celebrated on the 24th of September, 1831--with its simple De Witt Clinton engine, was beside a locomotive of gigantic proportions, the fastest in the world. This stupendous piece of machinery constituted a portion of the Vanderbilt enterprise.

In the German Section, two locomotives and seven kinds of _Eisenbahnwagen_, enabled us to decide upon the relative advantages of this foreign system and the American method of railway transportation. Great Britain contributed a complete train and locomotive, also a model of one of the original Stephenson locomotives--the "Rocket." The Railway Division of France comprised exceedingly interesting French locomotives, a car, and many models. In the Canadian exhibit, a complete transcontinental train compelled admiration. Its cars built of solid mahogany, and lighted by electricity, were constructed and equipped by the Canadian Pacific Railroad Company. Other foreign nations made their contributions to the railway division by models or illustrations of different kinds; prominently Austria, Belgium, Mexico, New South Wales, Sweden, and Norway.

The means of water transportation were so diversified that their multiplicity can distinctly be conceived by those only who have viewed them _in persona_.

There were represented: the birch-bark canoe from Alaska--a Norwegian steamship in miniature--the bimba or log canoe from Africa--the Bohemian propeller--corials from British Guiana--the Japanese pleasure-boat "Hoomaru"--the padda boats from Ceylon--the caique from Turkey; furthermore, models of Spanish war-vessels--Malay boats--Swedish ice-yachts--folding boats from Canada--Chinese war-ships--barges from Burmah--French torpedo boats--characteristic coast-vessels from India--Venetian gondolas--Dutch coast sailing boats--the caravels, Santa Maria, Nina and Pinta, exhibited by Genoa--Siamese boats--life-boats--naptha launches--and a great number of small craft shown by the United States.

Of historic interest was the old _bateau_ employed by early French traders from Quebec, and a model of a boat showing the style used on the Sea of Galilee in the time of Christ.

The artistic reproductions in miniature of various American, British, and German ocean steamers played an attractive part in this division. Among the models of war vessels was the representation of the ill-fated English cruiser "Victoria," considered to be the finest marine model ever constructed.

A section from the center of a modern Transatlantic liner reached to the top line of the gallery; exhibiting a complete interior of an American steamer.

The development of wheeled vehicles from the first inceptive idea of the wheel to the present appreciable methods of its use was comprehensively illustrated. The exhibits were so arranged that the different stages of improvement could be readily noticed.

The methods employed for conveyance on common roads were shown by hand-barrows--carts--trucks--drays--farm wagons--sprinkling carts--freight wagons--breaks, barges, wagonettes for pleasure parties--omnibuses--cabs--hansoms--pleasure carriages, coaches for four or six horses, Victorias, broughams, dog-carts, buggies, phaetons, etc.; besides sleighs--snow shoes--steam and electric carriages--ambulances for the sick and injured--hearses; furthermore, bicycles and tricycles--rolling chairs for invalids--baby carriages; in short, vehicles of every possible description.

Almost all the nations on the globe had made their contributions to the department of vehicle transportation. This rare collection embraced the palanquin of Africa--the mandarin chair of China--the bullock cart of Ceylon--the sedan chair of Colombia (South America)--the Sicilian cart of Palermo--the heavy lumbering cart of India--the queer traveling kroba of Turkey--the volante of Spain--the tarantass of Russia--the hackney coach of France--and the dog-cart of England.

Among the relics of special interest to Americans because of their association with historical personages, we beheld the well preserved carriages of Daniel Webster and James Knox Polk.

A conspicuous feature in the central court was a model of the largest steam hammer in the world, utilized in the manufacture of armor plate for vessels.

On entering the PALACE OF HORTICULTURE north of the Transportation Building, our organs of sight and olfactory nerves were equally affected by the dazzling and odoriferous display of exuberant flowers and fruitage. Had it been admissible, we would have been glad to put our organs of tasting in active operation, likewise. For, we longed to try the relish of some of the exquisite pomological exhibits, whose multiformity was too immense to be portrayed in a pen-picture. Fruits of every form and description, sent from all zones, climes, and countries were represented here. Many of the exhibits were maintained at a high standard by being

constantly replenished with fresh fruits at great expense, particularly the Californian citrus pyramid, comprising 31,150 oranges.

The richly decorated court planted with ornamental shrubs and flowers, led to the center pavilion which was roofed by a huge crystal dome. This translucent cover transmitted the light and sunshine necessary for the floricultural display beneath. Stately palms, tall tree ferns in great variety, and gorgeous specimens from the flora of almost every section, formed an immense pyramid of shrubbery. The luxuriously growing vines entwined their tendrils around the iron-work of the building, adding greatly to the beauty of the panorama. This superb spectacle recalled to memory Horace Smith's "Hymn to the Flowers." In one of its fifteen stanzas, the poet exclaims:

"Not useless are ye, flowers, though made for pleasure,
Blooming over field and wave, by day and night:
From every source your sanction bids me treasure
Harmless Delight."

We descended a cavern, extending underneath this magnificent flower exhibit. Our scrutinizing eyes met with quite novel features. We observed that the grotto was lined with glistening crystals from the mammoth cave of South Dakota. Emerging again to broad daylight, we bent our steps southward to that portion of the building, where the silver model of the Horticultural Hall and the miniature Capitol of the Country compelled the admiration of the beholder.

The south pavilion encompassed the displays of viticulture. Representations of actual scenes in the vicinity of California vine-yards-- wine cellars--cool grottos--and a highly ornamental fountain throwing sprays of wine, constituted the most attractive domestic scenes.

A picturesque panorama of the vine-clad banks of the Rhine with its romantically situated castles--reminiscences of feudal times--formed a portion of the German wine cellar exhibit; also comprising an excellent display of Rhein- und Moselweine.

Of the foreign wine-growing countries, the most attractive contributions were made by Italy, Spain, Portugal, France, Germany, Chili, New South Wales, and Canada.

We abandoned the building in order to view the floricultural out-of-door exhibits, which covered the large spaces on the lawns adjoining it and the Wooded Island.

Glancing at the beautiful orchids, roses, carnations, sweet peas, dianthus, asters, phlox, gladiolus, zinnias, and many other fragrant flowers, we experienced infinitely more subtle modulations of delight than can be easily described. The features of the horticultural displays were so striking that their memory is immortalized:--

"For this picture in my brain
Only fades to come again."

In fact, we had witnessed multifarious sublime spectacles during that day's sojourn in the White City.

Returning to the pier where the "Marguerite" lay moored, we were greatly amazed as we caught sight of Lake Michigan--to find its waters lashed into fury by a northeast gale, of which we had felt nothing while in the pleasantly tempered Horticultural Building.

Since it was impossible to stay where we were, on account of the exposed situation, there was no help for it--but to put out for our usual anchorage, inside the breakwater at Chicago. For my own part, I decided to remain on deck. Perhaps, had I realized more fully what we had to encounter, I should have sought my stateroom, with the rest. But I can truly say: for three-quarters of an hour, my whole energies were employed to keep my place.

During our entire journey from Schenectady, N.Y., to the White City, we had not experienced anything like it. Everything of a movable character had to be secured; and it was an intense relief to all, when after an extraordinary upheaval--the last effort of the uncontrolled waves upon our stanch craft--she passed into the peaceful waters behind the breakwater; completely sheltered from the raging elements, which broke with ceaseless roar upon the concrete mass.

The following morning as the rest of the party decided to remain in Chicago for the purpose of viewing the renowned play "America" in the Auditorium, I visited Jackson Park alone, spending many hours in the Liberal Arts Building, which inclosed (besides multitudinous magnificent displays illustrating the department of Liberal Arts) the object of my special interest, viz. the educational exhibits. They comprised not only contributions from every State in the Union but also from Germany, Great Britain, France, Mexico, Canada, Russia, New South Wales, Spain, Belgium, and Japan.

The general character of them was represented by models and appliances for teaching, text-books, diagrams, examples, specimens of the school work on the various scientific subjects, and illustrations of the methods employed in instruction by the teachers of the different States and Nations.

By means of the ingenious arrangement of these displays, manifesting the great achievements made in the development of pedagogy, I augmented my professional learning during the hours of that day to such an extent as would otherwise require months of careful study. The means of obtaining these results of so great interest and profit to me as a teacher, were much facilitated by my knowledge of several of the languages spoken by the nations represented there. For, I readily understood the reports, statistics, and text-books sent from the educational institutions of the leading countries. Furthermore, the commissioners of the respective sections, whom I addressed in their native tongue, complaisantly gave me all the additional information I desired.

As I inspected, among the manifold exhibits contributed by the State of

New York, the specimen work from the best pupils of the Art Students' League, some sketches from life and drawings from the antique attracted my special attention. They bore the signature of a young gentleman from Schenectady--Walter M. Clute--a name which, I am certain, will be widely known in future years as that of a prominent artist of this country.

We spent the following day--Sunday--in Chicago which is perhaps the most remarkable city in the world for its rapid growth. Its history dates back to the year 1803, when Fort Dearborn was erected. Abandoned at the beginning of the war with Great Britain in 1812, it was destroyed by the Indians; but rebuilt in 1816. The town was organized in 1833, and the first charter of a city passed by the Legislature, March 4, 1837. A number of outlying suburbs of Chicago were annexed by popular vote so that the present area of the city covers 181 square miles; its population being about 1,400,000. When we consider the fact that in 1871 a great fire, sweeping over the business center of Chicago, laid more than 2,000 acres in ruins, and then reflect on the city of to-day, rebuilt in a style of great solidity and magnificence, with its innumerable handsome buildings of stupendous proportions--its six hundred beautiful churches--and its vast number of educational institutions, we cannot but admire the spirit of enterprise which evolved such wondrous prosperity in little more than two decades.

The destructive fire constituted the largest conflagration of modern times. Commencing by the overturning of a lamp in a district built up almost exclusively of wood, about nine o'clock in the evening of October 8, 1871, it continued through that night and the greater part of the next day. Finally, it was checked by the explosion of gunpowder, whereupon it exhausted itself by burning all there was to ignite within the confined space. Although 18,000 houses had been reduced to ashes, ten years thereafter all traces of the calamity had disappeared.

It would be impossible to give a description of all the fine buildings which have made Chicago famous. The principal hotel--probably the largest in the world--is the "Auditorium," having its dining halls on the tenth floor. All the conveniences that modern ingenuity has excogitated--in accordance with the requirements of the present era--have been introduced into this huge structure. It includes a theater having a seating capacity for 6,000 spectators.

The park system of Chicago is one of the most extensive in the world. Jackson and Washington Parks belong to the south division, whereas the western section inside the city limits comprises three; known as Humboldt, Garfield, and Douglas Parks. Their ornamentation is varied by superb flower-beds, fountains, statues, and monuments. Lincoln Park--including a zoological garden, and being romantically situated upon the lake shore in the northern portion of the city--constitutes a delightful place of amusement for pleasure-seekers. The parks are all connected by boulevards--some of them 200 feet wide--encircling the city, and affording a continuous drive of thirty-five miles.

The trade of Chicago is enormous. Its chief items are grain, live-stock, meat products, and lumber. It principally manufactures iron and steel,

wood, brick, leather, chemicals, boots and shoes, cigars and tobacco.

The next day after our return to the Chicago Harbor in the evening, Mrs. Dr. McDonald of Chicago accompanied by her brother, Mr. Bernard, paid us a visit on board the "Marguerite." Miss Campbell made the acquaintance of this amiable lady during her last trip to Europe; and they were traveling-companions, spending many pleasant days journeying together in the old world.

The WOMAN'S BUILDING was the first structure to be inspected after our next arrival on the Exposition Grounds, according to the programme for that day. It represented a great museum filled with countless contributions made by women. The superb displays of paintings, ceramics, art work, manufactures, liberal arts, embroideries, fancy work, laces; moreover, dentistry, surgery, authorship, pedagogy, etc., and works of female artisans--evinced that womankind is able to compete with man, not only in the arts and sciences and in the more delicate achievements of handiwork, but in almost every department of human activity. Even the exterior of this handsome building, erected in the style of the Italian renaissance after the design of Miss Sophia G. Hayden of Boston--with its exquisite sculptural decorations--executed by Miss Alice Rideout of St. Francisco--bore testimony to the fact, that women are entitled to enter into competition with their male colleagues.

Here, we beheld exhibits forwarded to this unique structure by women of every clime and section of the globe. Even ladies of European monarchical families were represented--the Queen of England and her daughters by works of art--the Empresses of Germany, Russia, and Austria as well as the Queen of Italy by costly laces--often the work of their own hands--and invaluable jewels--with romantic histories.

The decorative needle-work exhibit constituted a very selected and complete collection; there being offered to view pieces of embroidery to the value of \$8,000.

All that was to be seen in this edifice proved the opinion that women are justified in demanding a position equal to men.

Nevertheless, many refuse to acknowledge this claim of equalization by pronouncing woman inferior to man concerning intellectual abilities. Daily experience and the records of the past, however, demonstrate sufficiently that many modern industrial pursuits have successfully been carried on by female activity. Not only the occupations, which require manual dexterity and good taste, also the higher branches of various sciences and arts have been excellently mastered by educated ladies, performing professional duties, whose execution demands a vast amount of intelligence and learning. Thus the official U.S. census of 1890 contained the enumeration of 2,438 doctresses; 110 female lawyers; 2,136 architectresses; and 155,000 lady teachers in public schools. Among the students, attending the diverse colleges in the Republic, more than 18,000 are young ladies. Even as inventors, women have distinguished themselves, as we may judge from the fact that during the last three decades, about 2,500 patents have been granted to female claimants, and scientific papers published--in 1884--a

list of contrivances deriving their existence from the inventiveness of females.

Of the uncountable evidences of woman's inventive genius, the enumeration of the following devices and improvements may suffice: a chain elevator; an appliance for lessening the noise of elevated cars; a lubricating felt for diminishing friction (very useful for railroad cars); a portable water-reservoir for extinguishing small fires; an apparatus for weighing wool (one of the most sensitive machines ever invented, and of incalculable advantage for the wool industry); a rotary loom (performing thrice the work of an ordinary one); furthermore, manifold improvements to the sewing-machine, such as a device for threading the needle while the machine is in full operation; an appliance for sewing leather--contrived by a woman in New York who runs a saddlery business there--; and many others. To the sensational inventions, originated in female brains, belong--the sea-telescope devised by Mrs. Mather, an instrument for the purpose of examining the keel of a ship without requiring her being put into the dry-dock--and a complicated machine for manufacturing paper bags, a very intricate affair which many eminent mechanics have made but unsuccessful efforts to contrive. Since then, Miss Maggie Knight, the inventress of the machine above mentioned, has found out another; namely for folding paper-bags. The latter performs the work of thirty men, and has been put up under that lady's personal supervision in Amherst, Mass.

The wonderful achievements made by women in America, have not been attained by females of any other country on the globe. This circumstance is mainly due to the fact that the public school as well as the college system in the United States--contrary to that of other nations--makes a finished education accessible to both men and women.

According to a report given by President White of the University of Michigan--an institution that admits students of both sexes--out of 1,300 attendants of the Greek class, the best scholar was a young lady. In mathematics and other scientific studies, girls had the highest standing. Furthermore, the profession of teaching in this country is principally in the hands of women; which proves that the possibility of cultivating the female mind to a high stage of perfection is absolutely unquestionable.

Moreover, philosophers of modern times have demonstrated that it is wrong to assign to woman a position inferior to man by basing it on the theory--that her brains have smaller dimensions. For, it is not the quantity of the _viscus_ alone that settles this scientific question; but the weight of the brains in direct proportion to that of the person's body.

Recent scientific researches, accomplished by the noted Parisian physiologist Broca, yielded the result that the ratio of woman's brains compared with man's, contains even a surplus of one to four per cent.

Now, that science acknowledges that the female intellect is educable to the same degree as that of man; would it not appear to be a perversion of judgment to undervalue ingenuity, because it accidentally had its seat in female brains? Would it not be unjust to leave talents undeveloped and

without cultivation, simply because a woman possesses them?

The active part woman took in the promotion of the Columbian Exposition is additional proof of her ability; and on this occasion she comes to the front rank more than ever before in her history.

Repairing to the northern portion of the park, we entered the "ART PALACE" through the southern of its four main entrances. We found ourselves in a gallery where the magnificent sculpture exhibit captivated our eyes.

In the court running east and west, we beheld a fine display of architecture showing models of many famous edifices in the world, and their exquisite portals and architectural ornaments.

The American section located in the northeastern part of the building, comprised a collection _par excellence_ of elegant paintings, masterpieces from the best artists of this country. Very interesting was the retrospective art exhibit in this department; illustrating the various stages in the development of American art, from its incipiency to the present perfection.

The remaining space in the eastern pavilion was taken up by the French _division_, which--we acknowledged unanimously--contained the most laudable contribution made by a foreign nation.

Great Britain's select display, representing some of its great artists, constituted the most extensive foreign section next to France.

German art was represented by 580 fine paintings, including all the German schools that have gained celebrity; as the Bavarian in Munich--the Saxon in Dresden--and many others.--Holland, Belgium, Russia, Spain, Austria, Italy, Norway, Sweden, Denmark, and Canada had their share in the splendid effect, likewise.

The Japanese showing, elucidating the style of art, peculiar to that skillful nation, was very attractive and novel.

If we trace back the records of the previous international expositions, we cannot find any report giving account of a similar collection representing modern works of art. In consequence of political causes, France had seldom made contributions to any but her own _expositions_. But the United States, not fostering hostility with any nation, was universally assisted in her gigantic enterprise. In fact, it would require volumes to describe in detail this elaborate display, whose prominent part--the home exhibits--verified Irving's words: "In America literature and the elegant arts must grow up side by side with the coarser plants of daily necessity."

The Art Palace environed groups and figures in marble and bronze, and other sculptural master-pieces--paintings in oil and water colors, on ivory, enamel, metal, and porcelain--fresco paintings on walls--engravings--etchings--pastel and many studies in chalk and charcoal; in short, every description of modern progress in this direction, even to

excellent effects produced on wood with hot irons.

Art is but the human effort to seize some of Nature's notable transitory features to perpetuate them. The unusual scenes of grandeur and of beauty our divine mother reveals to us in some of her moods, we adore, while they are inspirations to the poet and painter; and in this untiring course of art, many geniuses have become apotheosized.

To take a lovely landscape at sunset: when from the side of some enchanting stream, you look toward the mountains in the west, and see the crimson and light blue curtains of the evening slowly shaken out; their fringes of burnished gold glowing with indescribable magnificence--who can portray it and do it justice? This evening robing of those variegated crests! That mingling of color, until it fades into deep violet dyes! They in their turn passing away to give place to the jewels of the night, whose unchanging song of eternal praise goes on----

Before such scenes, a Corot, or an Aubert dips the pencil in the glowing sky, and transfers its hues to the canvas; so that, in after time, our souls are gladdened by some retrospect, which makes life dearer to us amidst its cares.

We must not consider art as the rival of nature, but her child that pays to her the most graceful tribute of homage by making her impressions permanent.

Highly interesting exhibits were presented to view in the _Anthropological Building_, including instructive ethnological and archaeological collections. In connection with the latter section were the relics shown in the Convent de la Rabida--where Columbus, almost discouraged, found a cordial reception and kind assistance from Father de la Marchena--; the Yucatan Ruins--an illustration of ancient architecture and sculpture--; the homes of the Cliff Dwellers--vestiges of probably the earliest civilization of the American continent--; the Spanish Caravels--built in Spain for the Exposition--; the Viking Ship--reproduced from a Norwegian vessel a thousand years old--; and the Esquimaux Village--exhibiting natives (their habitations, and sports), reindeers, and Esquimaux dogs.

The handsome structures erected by the Foreign Nations as well as those built by the States and Territories of the Union, were designed particularly for the entertainment of those visitors who constituted their respective representatives. Nevertheless, many of them were beautifully and expensively fitted up; inclosing magnificent native products. Their unique features were so manifold that it would be an impossibility to describe them deservingly without dedicating a volume to that purpose.

The nineteen foreign buildings, each of which illustrated some classic style of architecture--peculiar to the nation represented--constituted an additional great feature of the Columbian Exposition. They gave the visitor an adequate conception of the construction and luxurious equipment of edifices abroad. In fact, on entering the buildings of Germany, France, Great Britain, Spain, New South Wales, Ceylon, Canada, Sweden, Costa Rica, Hayti, Guatemala, Japan, etc., we fancied ourselves to be suddenly

conveyed to these foreign countries.

With a few exceptions, all the forty-four States and five Territories of the Union, had their share in the beautiful effect produced by their structures, erected--at a considerable expense--of such material as elucidated the prominent natural resources of the respective states. Many of the edifices were modeled after buildings noted for some historical event. Thus, the New York Building was a reproduction, slightly modified, of the old Van Rensselaer residence, whose quaint architecture recalled a most interesting period in our national history, when the great metropolis of to-day was but a small sea-port town.

This World's Fair, which has recently been brought to a close, evinced to the millions of visitors, who were drawn by its multitudinous attractions to the White City from every section of this country, and from almost every quarter of the globe that it eclipsed in grandeur and excellence all of the previous universal expositions; for everything that good taste and modern genius could suggest and accomplish, was brought into play.

The financial account given by the auditor of the Columbian Fair stands thus: The entire cost of the Exposition to its close and the winding up of its affairs amounted to \$26,288,685.67. Its total receipts were \$28,151,168.75; thus exceeding the expenditure by \$1,862,483.08.

The wonderful and rapid development of the international expositions may be recognized by the following statistics, compiled from the annals of their short history:

Ordinal Number	Year	Location	Area in Acres	Duration in Days	Exhibitors	Visitors
1	1851	London	20.06	144	17,000	6,039,000
2	1855	Paris	24.71	200	21,779	5,162,000
3	1862	London	22.24	171	28,653	6,211,000
4	1867	Paris	29.44	217	50,236	10,200,000
5	1873	Vienna	39.54	186	42,000	7,254,000
6	1876	Philadelphia	59.31	184	60,000	9,900,000
7	1878	Paris	59.31	194	32,000	13,000,000
8	1889	Paris	74.14	183	60,000	32,000,000
9	1893	Chicago..Exp	533.00	183	50,000	27,412,728
		...MP	80.00			

Unable to obtain the exact figures denoting the number of exhibitors of the Columbian Exposition from any authentic source of information, I introduced into the above table the number of 50,000, mentioned in a newspaper, and therefore not absolutely reliable.

CONCLUSION.

The universal verdict is--that the World's Columbian Exposition at Chicago was a great success; and although disappearing like a dream, it will be a lasting and useful one. The mention of a few features, at once creditable to the age, and pointing hopefully to the future, may suffice to prove this opinion: Notwithstanding the great rivalry between nations, there has not been a particle of jealousy, or unkind criticism exhibited at these great congresses. Intelligent and representative people have been brought together from all parts of the earth, who--on returning to their homes--carried with them the germs of better feeling, which will have a tendency to break up the barriers of bitter prejudices and bigotry hitherto existing. The less favored and darker parts of our earth come more into the light. Our children have had lessons, which no history or geography could convey; our women have taken a stand from which they never will recede. In the presence of the wonders shown us, and all the grand efforts of human genius, we become less selfish and more humane; a greater respect for each other is evoked. Yes, it has been a good thing!

All honor to the nations of the earth, who so generously have come forward with their best treasures, not sparing trouble or expense in this promoting, grand feature of human progress! The millions spent here, have been well employed; and we can safely say that--but for the unfortunate fact that during the time of the exposition, we were passing through a season of unusual financial depression--the attendance at the World's Fair would have been much larger. Nevertheless, it was a great success. All honor to the Hon. George R. Davis, the General Director! All honor to his co-laborers! All honor to every one who did anything to push it along! For, it is gone--giving the pulse of the world the holiest thrill it ever had since its creation.

FINIS.

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